Forest Dept.
Madras.
report
1930-31 — 2 vols and
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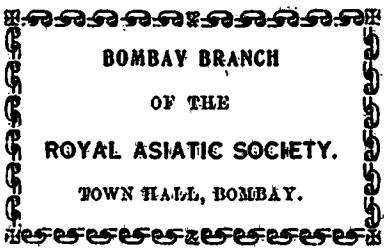

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ADMINISTRATION REPORT

OF THE

FOREST DEPARTMENT

OF THE

MADRAS PRESIDENCY

FOR THE

YEAR ENDING 31st MARCH 1931

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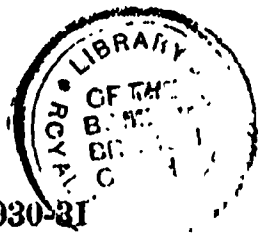

VOL. I — 1930-31

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BOMBAY BRANCH
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Government of Madras

DEVELOPMENT DEPARTMENT

G.O. No. 1614, 7th November 1931

Forests—Administration Report, 1930–31—Recorded with remarks.

READ—the following paper:—

Proceedings of the Chief Conservator of Forests, No. 442/31, dated 15th October 1931.

Order—No. 1614, Development, 7th November 1931.

Recorded.

2. It was stated in the review on the last year's administration report that the Government had not yet come to a final decision in regard to the future policy in the matter of the forest administration in general in this Presidency. The Government have now decided that the activities of the department should continue to be directed to the conservation, protection and exploitation of State forests, but that in respect of exploitation, mechanical exploitation on a large scale should be abandoned as unsuited to Madras forests and that it should be carried out to the extent sylviculturally and economically expedient, the methods of extraction to be applied in each case being decided with due regard to efficiency and economy. The present classification of forests will also be maintained. The strength of the subordinate staff has been reduced and the question of the staff required in the higher ranks is under consideration.

3. Experiments in lac cultivation continued and some useful results were obtained.

4. The figures of forest offences show no great variations. In the year under review there was some but not any appreciable improvement in the matter of investigation into cases of forest offences. The Government trust that more attention will be paid to this work.

5. The future of the Forest College is still under consideration.

6. The Government observe with interest the progress made in the amelioration of the jungle tribes in the Presidency.

7. There was a considerable decline in the net revenue realized during the year under report. As stated in paragraph 117 of the Chief Conservator's report, the fall was mainly due to the prevailing trade depression with a marked decline in prices.

(By order of the Governor in Council)

S. V. Ramamurti,
Secretary to Government.

To the Chief Conservator of Forests.
,, Accountant-General.
,, Assistant Director of Commercial Audit.
,, Board of Revenue.
,, Secretary to the Government of India, Department of Education, Health and Lands (with C.L.).
,, Inspector-General of Forests (with C.L.).
Press.

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Proceedings of the Chief Conservator of Forests

Proceedings No. 442, Press, 15th October 1931

Administration Report—Forest Department—1930-31.

A. WIMBUSH, Esq., I.F.S.,
Acting Chief Conservator of Forests.

Proceedings—No. 442, Press, dated 15th October 1931.

I.—INTRODUCTION.

The year 1930-31 was noteworthy for the acceptance by Government of the proposals of the Chief Conservator for the reorganization of the Forest department. With the closing down of the saw mills and mechanical logging operations and the termination of the appointments of the technical experts originally employed to give effect to a policy of intensive development, the necessity arose for a decision as to the future policy to be pursued and as to the organization required to pursue it. In order to arrive at this decision, Government propounded a detailed questionnaire in the year 1928. A wealth of information was collected from every division and, as a result of it, a scheme for the reorganization of the department was drawn up by the Chief Conservator and accepted by Government.

2. The reorganization of the department provides for giving effect to a conservative policy of steady development based on the recognized principles of Forest management. A special circle—the Working Plans Circle—is retained for ascertaining what the forests contain and, thereafter, drawing up Working Plans for exploiting the interest or increment in the form of timber and other produce whilst, at the same time, improving the capital, as represented by the forest. The Forest College for training the necessary executive officers for carrying out the prescriptions of the Working Plans under the guidance of the gazetted staff is retained. A Forest Utilization Officer is provided for and his duties are connected with the marketing of forest produce. Provision is made for a Forest Engineer to whom major works of construction are entrusted. In order that the all-important prescriptions of Working Plans for the improvement of the forest capital may be formulated on correct lines, the cadre provides for two Provincial Silviculturists whose duties are to carry out research with reference to the many problems connected with the raising of forest crops in localities whose rainfall varies between some 200 inches a year and about 20 inches.

3. Having obtained approval of the organization briefly outlined above, two things are necessary in order that the fullest benefit may be derived from it. One is sufficient money to give practical effect to the accepted principles, and the other is a lively demand for the whole of the forest produce which the Working Plans show can be removed with benefit to the forest. Without the second, the first is not easy of attainment.

In the year 1930–31, the demand for timber and other forest produce did not equal the supply and, moreover, the prices obtained were, in many instances, far below normal.

Sandalwood is one of the chief revenue-producing products of the Madras forests. In the year under review, some 900 tons were available for sale, but it was only possible to dispose of 564 tons and the average price obtained was not much more than half that obtained in the previous year.

There was also a slump in the market for big timber with the result that some timber depots still contained large unsold stocks at the close of the year. In view of this fact arrangements for curtailing felling for the immediate future had to be made in several localities.

4. Fortunately, the depressed state of the timber market and the unfavourable financial situation were not able to prevent the trees from growing. The year 1930–31 was not an unfavourable one from the silvicultural point of view in some of the divisions and various successful plantations were made. It is not unreasonable to hope that the financial position will have improved by the time that these plantations come to maturity and that they will be a source of handsome profit to a future generation—a reflection which should cause all concerned to realize how necessary it is to exercise extreme caution before deciding to curtail too drastically expenditure on creative work by a department which exists and works for the future no less than for the present.

II.—WORKING PLANS.

5. The following table shows the position as regards the preparation of Working Plans during the year :—

Circle.	Division.	Name of Working Plans.	Progress made.
First ..	Ganjam ..	Revised Working Plan for the Ghumsur forests.	Completed.
	Upper Godavari.	Working Plan for the Upper Godavari forests.	Details of Part I of the Working Plan were collected by the District Forest Officer. Working Plan to be prepared by the Working Plan branch.

Circle.	Division.	Name of Working Plans.	Progress made.
First—*cont.*	Lower Godavari.	Working Plan for the Lower Godavari forests.	Revision and consolidation of the Working Plans in the division taken up towards the close of the year.
	Vizagapatam ..	Working Plan for the Vizagapatam forests.	Revision and consolidation of the Working Plans in the division taken up.
	Guntur ..	Working Plan for the Guntur Upland forests.	Draft already prepared was being revised.
	Nellore ..	Revised Working Plan for the forests in Sriharikota Range.	Was being redrafted.
	Do. ..	Working Plan for the Sathiavedu Range.	Revision will be taken up in the current year.
Second ..	South Kurnool.	Working Plan for the whole of the Giddalore Range and a portion of the Gundlakamma Range.	Sanctioned.
	West Kurnool.	Working Plan for the West Kurnool forests.	Completed.
	South Cuddapah.	Working Plan for the South Cuddapah forests.	Completed.
Fourth ..	Vellore ..	Revised Working scheme for the Odugathur forests.	Kept in abeyance pending the bifurcation of the Vellore division.
	North Salem ..	Working scheme for sandalwood.	A three-year temporary scheme was sanctioned by the Conservator for working the sandalwood areas.
	Central Salem.	Consolidated Working Plan for the Central Salem forests.	Completed.
	South Salem ..	Consolidated Working Plan for the South Salem forests.	Completed.
Fifth ..	North Coimbatore.	Working Plan for the North Coimbatore forests.	In progress.
	Kollegal ..	Working Plan for the Kollegal forests.	In progress.
	South Coimbatore.	Revised Working Plan for the Mount Stuart forests.	Completed.
	Madura ..	Working Plan for the Madura forests.	Materials for Part I being collected by District Forest Officer. The Working Plan will be prepared by the Working Plan branch.
	Tinnevelly ..	Working Plan for the deciduous forests.	Part I of the plan was under preparation.
Sixth ..	North Mangalore.	Revised Working Plan for the North Mangalore division.	In progress.
	South Mangalore.	Revised Working Plan for the South Mangalore forests.	In progress.
	Wynaad ..	Working Plan for the Wynaad Ghaut forests.	In progress.
	Nilambur ..	Working Plan for the New Amarampalam forests.	Reconnaissance report submitted by the District Forest Officer, and orders have since been issued.
	Palghat ..	Working Plan for the Chenat Nair, Dhoni, Silent Valley and Attapadi Reserves.	Under preparation.
	Do. ..	Revised Working Plan for the Thadagam, Anaikatti and Bolampatti Block III Reserves.	Sanctioned after the close of the year.

6. In the case of the Working Plans for the Ghumsur forests, Lower Godavari, North Coimbatore, Kollegal, the Mount Stuart forests, North and South Mangalore divisions, the Wynaad Ghaut

forests and the Chenat Nair, Dhoni, Silent Valley and Attapadi Reserves, the work was carried out by special Working Plan parties under the direct control of the Working Plans Conservator. In all other cases, the Working Plans on completion will be scrutinized by the Working Plans Conservator.

7. At the close of the year sanctioned Working Plans or schemes were in existence for 9,422 square miles. Working Plans for 3,309 square miles were awaiting sanction or were under preparation, leaving 6,330 square miles of Reserved Forest for which no Working Plans have yet been started.

III.—UTILIZATION.

(i) SUPPLY OF PRODUCE.

(a) *Timber.*

8. The total output of timber was 85,580 tons or 11·7 per cent less than the figure for the previous year. The details are—

Removed from	By Government.	By purchasers.	By free grantees.	By right-holders.	Total.
	TONS.	TONS.	TONS.	TONS.	TONS.
Reserved Forest, Leased Forest and Reserved Lands.	37,860	13,440	720	360	52,380
Unreserves	640	28,880	3,360	320	33,200
Total ..	38,500	42,320	4,080	680	85,580

9. The total quantities of timber and fuel exploited from departmental forests showed a small increase this year also. There was an increase in the outturn of timber extracted by departmental agency in the First and Fifth Circles. In the First Circle, it was due to the resumption of departmental extraction of timber from the plains sal timber Working Circle and Selection Working Circle in Ganjam and to the extraction of a large quantity of sal timber from the Palakonda Range in Vizagapatam. In the Fifth Circle, the increase was due to a larger quantity of sandalwood (which is also included in Form No. 35) being extracted in Kollegal and to increased outturn of timber from the Punachi Timber Working Circle in South Coimbatore. There was a decrease of 118,000 cubic feet in South Mangalore due to the closure of the Parappa Saw Mill and to the curtailment of fellings owing to large stocks being on hand. A decrease of 100,000 cubic feet in Nilambur was due to the postponement of subsidiary fellings. Against these was an increase of 114,000 cubic feet in Palghat due to expansion

of operations in Silent Valley and Kalladikot and of 56,000 cubic feet in Wynaad and the Nilgiris due to the actual yield having exceeded the estimated yield.

10. There was a decrease in the quantity of timber extracted by purchasers in the First Circle due to resumption of departmental fellings in Ganjam and to a smaller number of assignments of land, in the Second Circle due to lack of demand and fewer assignments of land and also in the Sixth Circle due to a low yield in Palghat, to the restricted sale of dead wood in Wynaad and fewer assignments of land.

11. The quantity of timber felled departmentally and remaining undisposed at the end of the year in forest and sale depots was 1,413,000 cubic feet as against 1,358,000 cubic feet in the previous year. The accumulation was principally in the Wynaad and Nilambur divisions and is due to the unusual slump in the timber market, a result of the world-wide economic depression.

(*b*) *Fuel.*

12. Two lakhs thirty-four thousand eight hundred and twenty-five tons of fuel were removed from Reserved and Leased Forests, of which 13,800 tons were removed by departmental agency. The outturn from unreserves was 21,262 tons. The decrease (1,350 tons) in the total output by departmental agency was mainly due to the stoppage of the supply of charcoal to the Kurnool Municipality and to the abandonment of charcoal manufacture in Anantapur as being unprofitable. Also to a small extent (500 tons) in the Sixth Circle due to the absence of departmental fellings in Nilambur.

13. The increased removal by purchasers is due to the sale of a greater number of fuel coupes in South Cuddapah and to the larger yields from coupes sold in the Nilgiris and North Mangalore divisions.

14. Further progress was made in the Second Circle in the opening up of new felling areas and generally greater attention was paid everywhere to the need for affording facilities to the people for obtaining their requirements by legitimate means.

(*c*) *Bamboos.*

15. The value of bamboos removed from the forests by all agencies during the year was Rs. 3·94 lakhs against Rs. 4·55 lakhs in the previous year. The decrease was in the First, Second and Fourth Circles and was mainly due to poor prices realized for bamboo coupes on account of trade depression. It was also to a certain extent due to the fact that five kists were collected during the previous year in accordance with the system of working in the

Vellore division, whereas only four kists were due for collection in the year in question. Lack of demand and the gregarious flowering of big bamboos in South Salem also contributed to the decrease.

(*d*) *Sandalwood.*

16. Five hundred and sixty-four tons of sandalwood were sold for Rs. 4,40,755 as against 707 tons for Rs. 9,86,618 in the previous year. The average price realized was Rs. 782 per ton as against Rs. 1,395 in the previous year.

17. Owing to general trade depression which resulted in merchants having stocks on hand, demand for sandalwood was very slack. Normally the annual sales at Vellore, Tiruppattur and Satyamangalam take place in December but, on the express and repeated request of the dealers in sandalwood, the sales were held only in February 1931. Even then there was a great fall both in the demand and in the prices as indicated above, the average selling rate being only a little more than half that obtained in the previous year.

18. The total quantity of sandalwood extracted during the year was about 900 tons which leaves a balance of about 336 tons of wood on hand.

(*e*) *Grazing.*

19. 12·36 per cent of the forests managed by the Forest department was closed to grazing either throughout the year (11·18 per cent) or for part of the year (1·18 per cent). Grazing permits were issued for 1,531,661 animals as against 1,649,805 in the previous year. It is reported that permits were issued for 895,781 animals for grazing in panchayat forests. During the year 86,135 animals grazed free of charge in the areas under departmental control as against 84,591 animals in the previous year. In the forests under panchayat management, 2,204 animals are reported to have been allowed free grazing. The revenue foregone by allowing free grazing and grazing at concession rates in the departmental forests was Rs. 43,480 as against Rs. 43,041 in the previous year.

20. There was a decrease in the number of animals grazed in all the circles and it is mainly attributed to cattle mortality by epidemic diseases and to the late setting in of the monsoon in Ganjam, Vizagapatam and Guntur. The decrease was also due to the system of refusing permits to villagers adjoining Reserves under panchayat management during the months of July and August which are the most important months in the grazing year. This was done with a view to preventing cattle of panchayat areas grazing in the departmental Reserves to the detriment of the panchayat income.

21. The average incidence of grazing in the Reserved Forest under the control of the Forest department works out at 5·5 acres per animal as compared with 5·7 acres in the previous year, the figures being as low as 2·27 in Lower Godavari and 3·65 in Guntur. These figures show that a reduction in the grazing incidence is urgently called for. As long as Government adhere to the present policy of " no enhancement of grazing fees " and as long as the range-wide system is not replaced by the old block system, there is no possibility of reducing the grazing incidence. In view of the fact that cattle are allowed to graze over a whole range on a single permit and that the present grazing rates are far below the market value of grazing, the question of increasing the existing rates is well worth reconsideration as a very legitimate means of improving the present financial resources of the State.

(*f*) *Minor forest produce.*

22. The right to collect minor forest produce was leased out as usual except in a few cases of departmental collection. The revenue derived in the year was Rs. 6,44,453 (Rs. 2,15,618 from Reserved Forests) as against Rs. 9,02,688 in the previous year. The decrease is spread over all circles and is principally due to poor prices realized on account of trade depression, and also to the failure of the tamarind crop in the First and Fourth Circles.

23. Experiments in lac cultivation were continued at Jowalagiri and Deverbetta. The experiments carried out on the Chitteris have demonstrated the suitability of the locality for the production of lac and that the local Malayalis could be trained to carry on its cultivation as a village industry, as is done in parts of Bihar and the Central Provinces. In view, however, of the present low price for lac, it was decided that no further developments in the Chitteris should be made until the market shows a decided improvement. Experiments were also carried out in North Coimbatore, Madura and Palghat divisions with varying results.

(*g*) *Removal of forest produce by free grantees and rightholders.*

24. The estimated value of forest produce removed by free grantees and rightholders amounted to Rs. 85,120 against Rs. 73,389 in the previous year. The above does not take into account the value of the produce removed in virtue of the concessions allowed to the ryots in the South Kanara district. The increase was chiefly in the First Circle and was due to the fact that extensive free grants were made for rebuilding houses destroyed by frequent fires. Most of the free grants in the year under report were, as usual, for the reconstruction of houses destroyed by fire.

(ii) COMMERCIAL UNDERTAKINGS.

25. In view of G.O. Ms. No. 1287, Development, dated 29th August 1931, the activities of the commercial concerns in this department are dealt with in greater detail than in previous reports. In addition to the results of the year's working of the concerns, their financial and business aspects, both present and prospective, are also dealt with in sufficient fullness.

(a) The Russellkonda Saw Mill.

26. The saw mill was closed on 1st July 1928, and since then the concern has been in liquidation. The liquidation accounts are still subject to annual audit by the Assistant Director of Commercial Audit.

The net result on the realization of the assets, taking into account the winding up expenses for the year under review, was a deficiency of Rs. 3,292-13-9, bringing the total deficiency on the liquidation to Rs. 6,208-3-3 up to 31st March 1931. During the year, a sum of Rs. 1,21,000 was withdrawn by the Accountant-General from the personal ledger account of the concern and credited to "Recoveries of investments in commercial undertakings." The cash position on 31st March 1931, after meeting all charges for the year, was a balance of Rs. 3,553-9-10 including Rs. 90-9-2 representing book debts considered good. A sum of Rs. 1,500 has since been withdrawn from the personal ledger account of the concern during the current year, leaving a balance of Rs. 2,053-9-10 to meet the liquidation expenses during the year.

27. As regards the assets of the concern, the idle machinery is being cared for by a fitter and two watchmen at an annual cost of Rs. 990. Under the orders of Government in G.O. Ms. No. 1158, Development, dated 9th July 1929, the saw mill buildings and furniture were transferred to the Public Works Department at the book value of Rs. 1,19,556 and this amount was credited to the concern in the accounts of 1929–1930. Subsequently it was found necessary to retain a portion of the saw mill buildings, to be sold along with the mill machinery and the question of refunding its value to the Public Works Department—Rs. 64,604–10–5—is under consideration.

28. The only suitable offer received for the mill was from Mr. Paramananda Sahu of Nimmakhandy in the Ganjam district. Government have, in G.O. Ms. No. 1316, Development, dated 3rd September 1931, accepted his offer of Rs. 25,000 for the entire saw mill machinery at Russellkonda and the buildings retained for sale along with the mill. In accordance with the terms agreed upon, Rs. 7,000 will be paid at the time of registration of the sale-deed, and the balance of Rs. 18,000 will be paid with interest in

three annual instalments of Rs. 6,000 each, commencing from 1st May 1932. The sale of the machinery and buildings will complete the liquidation of the concern except for certain spare parts. The disposal of these is under consideration and when this is effected, the assets of the concern will be completely disposed of.

(*b*) *Chenat Nair Forests.*

29. With the closure of the Olavakkot Saw Mill from the 5th November 1929, the concern has been in liquidation. Extraction activities were completely stopped from 1st April 1930, and the present review is therefore confined to the liquidation of assets.

The liquidation accounts are separately recorded in the ordinary books of the Forest Engineer's division and adjusted monthly by the Accountant-General in the personal ledger account of the concern. The accounts still continue to be audited by the Assistant Director of Commercial Audit annually.

30. The value of the assets of the concern on 1st April 1930 was Rs. 4,01,243-7-5. The disposals during the year under review aggregated to Rs. 1,83,955-12-5; of this, Rs. 1,19,252-11-3 represents the realization of book debts and advances outstanding, Rs. 9,166-2-0 the proceeds of the timber stock sold; and the balance of Rs. 55,536-15-2 represents the value of fixed assets disposed of—mostly roads and buildings. The permanent and temporary roads of the concern and some of the buildings were transferred to the Palghat division at a valuation of Rs. 13,104-15-0 and this amount was credited to the concern and withdrawn as recoveries of investments in Government commercial undertakings.

At the end of the year, assets valued at Rs. 2,17,287-11-0 were left over for disposal. These comprise lands and railway siding valued at Rs. 29,617-6-2, saw mill buildings valued at Rs. 31,752-13-0, plant and saw mill machinery valued at Rs. 1,14,837-4-0, tractors valued at Rs. 12,426-8-0, stores, spares and material of telephone lines dismantled valued at Rs. 25,170-9-0, and advances and book debts amounting to Rs. 3,483-2-10.

31. The decision to sell the mill was reached only in January 1931 after considering the possibility of its use in connexion with the New Amarampalam project. The question of transfer to the Telegraph department of the telephone lines dismantled is under consideration. One of the tractors was sold for Rs. 2,500 after overhauling and attempts are being made to sell the remaining tractors. Steps have been taken to effect the speedy recovery of advances and book debts still outstanding—Rs. 2,362. The entire timber stock of the concern has already been sold except for 1,344 cubic feet of mill-sawn scantlings with the Forest Utilization Officer who is taking steps to expedite their disposal.

32. The cash position of the concern on 31st March 1931 showed a balance of Rs. 1,96,045-0-7 at the credit of the personal ledger account and a sum of Rs. 1,91,354-0-4 was withdrawn, leaving the balance to meet the liquidation expenses which amount to about Rs. 2,350 per annum.

(c) *Mount Stuart Forests.*

33. This is a regular commercial concern under Chapter II of the Account Code with a separate personal ledger account. The area dealt with under this concern is the Tuncadavu range which is one of the five ranges of the South Coimbatore division. A revised Working Plan for these forests has been prepared and will be sanctioned shortly. The commercial accounts are subject to half-yearly and annual audit by the Assistant Director of Commercial Audit.

34. During the year under review, a total quantity of 115,617 cubic feet of timber was extracted as against 128,738 cubic feet in the previous year. 101,444 cubic feet were carted to the sale depot at Pollachi against 74,315 cubic feet in 1929–30.

The cost of production of logs delivered at Pollachi depot was Rs. 1-1-3·87 per cubic foot as against Rs. 1-0-2·92 per cubic foot in 1929–30; the increase in the production costs was due to the higher rate paid for carting consequent on the longer lead, and to an increase in overheads on account of the heavy repairs to roads during the year. The district overheads per cubic foot included in the production costs amounted to As. 7-11·42 against As. 6-11·08 for the preceding year.

35. The sale of logs at the Pollachi depot increased during the year from 85,784 cubic feet in 1929–30 to 91,034 cubic feet. The average rate realized for all the species was Rs. 1-7-6 against Rs. 1-10-5 in the previous year, the decrease being due to the slump in the market. The log section of the depot at Pollachi was transferred from the Forest Utilization Officer to the District Forest Officer from 1st December 1930, the Forest Utilization Officer continuing to be in charge of the sawn timber stocks. The Forest Utilization Officer however continued to conduct auction sales and special sales of logs at the depot.

The sales in the forests at the Topslip depot conducted by the District Forest Officer as usual increased during the year under review as compared with those of the previous year,—10,860 cubic feet being sold against 9,357 cubic feet in 1929–1930. The logs sold here were of inferior quality not worth carting to Pollachi. The rates realized during the year were however less than those

for the previous year, the average being As. 5-8 per cubic foot against As. 11-11·5 in 1929–30. These rates cannot be compared with those obtained at Pollachi for a better class of logs.

The log trading for the year resulted in a profit of Rs. 6,206-0-7 as against Rs. 68,397 in 1929–30. The reduction in profit is chiefly due to the slump in the timber market and to the general trade depression. A small profit of Rs. 423 was realized on the sale of 1,865 cubic feet of logs consigned to Madura for sale on a commission basis.

36. The saw mill at Topslip having been closed on 31st December 1929, no timber was sawn during the year. Out of the unsold stock of mill-sawn scantlings 5,707 cubic feet were disposed of at rates averaging Rs. 1-14-10 per cubic foot against Rs. 1-11-4 per cubic foot realized in the previous year. The closure of the saw mill reduced the loss on sawn timber trading from Rs. 32,317 in 1929–30 to Rs. 1,537 in 1930–31. The balance of stock remaining unsold on 31st March 1931 was 4,579 cubic feet and the bulk of this quantity represents species other than teak. Attempts were made to effect a speedy disposal of the stock by reducing the prices with fairly satisfactory results.

37. Three hundred and seventeen and a half sets of spokes and felloes were produced during the year and 562 sets (mostly the previous year's stock) were disposed of at an average rate of Rs. 11-5-5 per set, leaving a balance of 169 sets on 1st April 1931. The operations resulted in a loss of Rs. 3,113 as against a small profit of Rs. 347 in 1929–30, the reason for the loss being the want of demand and the consequent fall in the average prices realized.

38. The overseas consignment sales, handled by Messrs. Peirce, Leslie & Co., comprised the disposal of 115 cubic feet of *Adina cordifolia* (Haldu) and a free supply of samples of miscellaneous species amounting to 264 cubic feet. A loss of Rs. 624-15-2 was incurred on account of these sales, as against a profit of Rupees 3,745-14-3 realized in the previous year. The High Commissioner for India, London, completed the audit of the books of Messrs. Howard Bros., Ltd., London, ex-agents for the sale of Government timber in the overseas market, and on receipt of the audit report final adjustments were made in respect of the consignments from 1925–26 onwards. A sum of Rs. 2,268-2-10 was written off to the profit and loss account of the concern.

39. The year under review closed with a total loss of Rs. 13,454-6-11 which was reduced by Rs. 12,068 by the credit to the profit and loss account of Rs. 12,068 being the depreciation reserve on permanent roads, necessitated by the decision of Government that no depreciation should be charged on permanent roads in addition to the cost of repairs. The net loss for the year

amounted to Rs. 3,704-3-2 as against a profit of Rs. 38,463-7-6 in 1929–30. The cash position on 1st April 1931 was a balance of Rs. 1,17,900-10-0 at the credit of the concern.

40. According to the Revised Working Plan, a quantity of 180,000 cubic feet should have been felled during 1931–32. But due to the slump in the market and the year 1931–32 having opened with heavy stocks in the felling area, forest depots and the sale depot at Pollachi, aggregating 122,667 cubic feet, the extraction during the year has been restricted to 54,400 cubic feet of which about 30,200 cubic feet will be teak, 10,600 cubic feet *Petrocarpus marsupium* (vengai) and the balance *Dalbergia latifolia* (rosewood), *Terminalia tomentosa* (karimarudu), *Terminalia paniculata* (pillamarudu) and miscellaneous species. About 82,900 cubic feet (including previous year's stock) are expected to be carted to the depot at Pollachi where it is hoped to sell 92,390 cubic feet (including previous year's stock). The entire balance of unsold mill-sawn timber is expected to be sold before the end of March 1932. The year, it is expected, will close with 55,600 cubic feet of logs at Pollachi depot and 14,400 cubic feet at Topslip depot as closing stock. No consignment to overseas market will be made until the market improves. Due to the existing slump in the timber market and the general trade depression, the working of the concern during the current year (1931–32) is expected to result in a loss of Rs. 58,150. This loss takes into account overhead charges amounting to Rs. 60,450.

41. As regards the prospective financial and business aspects, it is too early to foresee with any degree of accuracy what the market conditions will be in 1932–33, but judging from the present slump the extraction during that year too will have to be curtailed. The normal fellings contemplated in the Working Plan amount to 150,000 cubic feet ; of this, 130,000 cubic feet are to be carted to Pollachi depot for sale. The operations of 1932–33 are expected to result in a profit of Rs. 7,700, with closing stocks of 92,700 cubic feet at Pollachi and 29,400 cubic feet at Topslip. But, if, in view of the abnormal market conditions now obtaining, curtailment is essential, as it is expected to be, only 50,000 cubic feet (out of 55,000 cubic feet to be felled) will be placed for sale at Pollachi depot and the operations of the year are expected to result in a net loss of Rs. 33,550 with unsold stocks of 12,700 cubic feet at Pollachi and 14,000 cubic feet at Topslip depots. The loss, as in the case of 1930–31, takes into account overhead charges amounting to Rs. 50,150.

(*d*) *Nilambur Valley Forests.*

42. This is a regular commercial concern under Chapter II of the Account Code, comprising the entire Nilambur division. The

forests are worked in accordance with a Revised Working Plan, except the inaccessible hill forests of Amarampalam range for which a separate Working Plan is under preparation.

43. During the year, a total quantity of 418,016 cubic feet of logs was felled as against 552,469 cubic feet in 1929–30. The figure of 326,818 cubic feet mentioned in the 1929–30 report as the quantity extracted includes only the final and clear fellings and excludes thinnings, selection fellings and fellings by contractors, etc., all of which are now included in the figures mentioned above. The quantity extracted by final and clear fellings alone from both the Nilambur and Amarampalam ranges aggregates 290,716 cubic feet as against 326,818 cubic feet in the previous year. The quantities extracted by final and clear fellings during the year are analysed below :—

Nilambur range.		Amarampalam range.	
Plantation—Teak.	Natural forests—Miscellaneous species.	Plantation—Teak.	Natural forests—Miscellaneous species.
C.FT.	C.FT.	C.FT.	C.FT.
68,092	68,606	10,619	143,399

The cost of extraction and floating to Beypore naturally varied with the localities. The comparative figures are—

—	Nilambur.		Amarampalam.	
	Plantation—Teak.	Natural forests—Miscellaneous species.	Plantation—Teak.	Natural forests—Miscellaneous species.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Cost of extraction at Nilambur—				
1930-31	0 2 8·6	0 3 8·8	0 5 3·9	0 5 4·8
1929-30	0 2 10·8	0 4 1·1	0 5 9·1	0 6 6·8
Cost of floating to Beypore—				
1930-31	0 2 10·3	No floating.	0 3 6·5	0 3 6·5
1929-30	0 1 11·9	0 3 3·5	0 3 9·2	0 3 9·2
Cost of delivery at Beypore of logs felled in—				
1930-31	0 5 6·9	No floating.	0 8 10·4	0 8 11·3
1929-30	0 5 9·1	0 7 4·6	0 9 3·6	0 10 1·3

Floating in the Nilambur range was done by contract, while in Amarampalam it was done under departmental supervision. There was a general decrease in the cost of extraction in both the Nilambur and Amarampalam ranges. But there was an increase in the floating charges in Nilambur and it is attributed chiefly to the logs having been floated from localities involving special difficulties

owing to which the contractor had to be paid higher rates. There was a slight reduction in overheads from As. 1-8·4 to As. 1-7·4 per cubic foot due to a reduction by 25 per cent in the proportion of district overheads to be charged to exploitation.

The use of the tractor was continued in 1930–31 for dragging timber in the natural forests at Nellikutha. The cost of working amounted to As. 2-2·5 per cubic foot against As. 3-4·7 per cubic foot in the previous year.

44. During the year under review 120,182 cubic feet of timber were sold in the forests at an average rate of As. 8-6 per cubic foot as against 97,513 cubic feet in 1929–30 sold at an average rate of As. 7-4 per cubic foot. The forest trading resulted in a profit of Rs. 41,026 as against Rs. 26,405 in 1929–30 and Rs. 10,916 in 1928–29. The total quantity of both 1929–30 and 1930–31 fellings floated to Beypore during the year amounted to 356,448 cubic feet against 314,989 cubic feet floated in 1929–30. The sales during the year at the Beypore depot aggregated 310,450 cubic feet against 158,719 cubic feet in the previous year. Though a considerably larger quantity was sold during the year than in the previous year, the average rate realized dropped from Rs. 1-8-8 per cubic foot in 1929–30 to Rs. 1-0-7 per cubic foot in 1930–31. With an increase in the quantity sold, and a decrease in the Forest Utilization Officer's overheads, the log trading at Beypore depot resulted in a profit of Rs. 1,39,078 against Rs. 1,18,504 in the previous year. The auction and other sales of logs in the depot were conducted by the Forest Utilization Officer, although the control of the log section of the depot passed into the hands of the District Forest Officer as from 1st December 1930.

45. The Beypore Saw Mill continued to work for only two months from the commencement of the year and was closed on 1st June 1930. During this short period a quantity of 4,861 cubic feet was converted into 3,164 cubic feet of scantlings, the outturn being 65·1 per cent against 56·7 per cent in the previous year. Due to the low intake, the production costs of mill-sawn timber increased to Rs. 2-0-11 per cubic foot from Rs. 1-12-1·2 in the previous year. The sales effected by the Forest Utilization Officer amounted to 9,539 cubic feet as against 32,127 cubic feet in 1929–30, the average rate realized being Rs. 2-2-9 per cubic foot against Rs. 3-2-11 per cubic foot in the previous year.

The loss consequent on the low prices obtained amounted to Rs. 2,426 as against a profit of Rs. 25,727 realized in the previous year.

The closing stock of scantlings was 15,328 cubic feet in charge of the Forest Utilization Officer.

Sleeper operations were continued and 3,809 broad gauge and 12,845 meter gauge first-class sleepers were supplied to the railways realizing a profit of Rs. 20,661.

46. A consignment of 913 cubic feet of timber sent to the overseas market was sold during the year at a loss of Rs. 842. Further consignments will not be sent until the market improves.

47. The working of the concern for the year resulted on the whole in a trading profit of Rs. 1,83,197 as against Rs. 1,69,805 in 1929–30, the net profit after taking into account items relating to previous years directly adjusted to the profit and loss account being Rs. 1,85,509 as against Rs. 1,71,189 in 1929–30. The year under review closed with a cash balance of Rs. 1,69,056 at the credit of the concern after the surrender of the entire working capital of Rs. 70,000.

48. The concern is expected to continue to work at a profit during the current and succeeding years. During the current year a quantity of 371,500 cubic feet will be felled and logged bringing the total stock in the forests to 729,600 cubic feet. Of this quantity, 160,400 cubic feet will be sold in the forests; 182,300 cubic feet will be floated to Beypore depot; 41,400 cubic feet will be converted into sleepers, leaving a balance of 332,200 cubic feet in the forests. At the Beypore depot it is expected that the entire stock of 338,000 cubic feet of logs including the last year's stock, and the unsold stock of 15,900 cubic feet of mill-sawn scantlings will be disposed of. Almost the whole of the fresh stocks has so far been sold at prices far higher than those obtained in 1930–31. The current year's operations are expected to result in a net profit of Rs. 3,18,000.

49. During 1932–33 it is proposed to fell and log a quantity of 418,200 cubic feet of timber, bringing the total stock in the forests to 750,400 cubic feet. Of this, 287,500 cubic feet will be floated to Beypore depot, where the entire quantity is expected to be sold. Forty-nine thousand six hundred cubic feet will be sold locally, leaving a balance of 412,800 cubic feet in the forests at the end of 1932–33. A net profit of Rs. 2,05,900 is anticipated on the working of the concern in 1932–33.

(*e*) *Wynaad Forests.*

50. The Wynaad Forest division has not been commercialized and ordinary forest accounts only are maintained by the district staff. But the Assistant Director of Commercial Audit audits the accounts annually and exhibits the results of the annual working on commercial lines. The exploitation unit comprises the whole of Chedleth and Sultan's Battery ranges and part of Begur range

covered by the Working Plan, for purposes of the audit report, and the remaining area, viz., the Kannoth range, is treated as non-commercial and its results of working are also shown separately in the audited accounts.

51. During the year under review a total quantity of 328,454 cubic feet of logs was felled in the commercial area as against 314,880 cubic feet in 1929–30. One lakh fifteen thousand seven hundred and sixty-six cubic feet of logs were carted from the Begur range to the sale depot at Mysore, and 92,589 cubic feet were carted to the Nanjangud depot, of which 39,655 cubic feet came from the Chedleth range and 52,934 cubic feet from the Sultan's Battery range.

The cost of production including district overheads amounted to As. 15-2·7 per cubic foot for delivery at Mysore, and Rs. 1-4-3·7 and As. 14-7·9 per cubic foot for delivery at Nanjangud from the Chedleth and the Sultan's Battery ranges respectively. The costs were slightly lower than those for 1929–30 except in respect of Chedleth timber carted to Nanjangud, the increase over the previous year's costs in this case being As. 4-0·8 per cubic foot.

The overheads included in the production costs were reduced from As. 3-2·5 per cubic foot in 1929–30 to As. 2-4·9 per cubic foot.

52. A quantity of 48,006 cubic feet was sold during the year in the forest depots of the three ranges at an average rate of As. 5-5 per cubic foot as against 57,517 cubic feet at As. 6-6 per cubic foot in the previous year. The log depot at Nanjangud was transferred from the Forest Utilization Officer to the control of the District Forest Officer as from 1st December 1930, but the former continued to conduct the auction and other log sales throughout the year in this depot as well as in the one at Mysore. The total quantities of log sold at Nanjangud and Mysore depots were 32,018 cubic feet at Rs. 2-6-7 per cubic foot in the former and 47,770 cubic feet at Rs. 2-5-0 per cubic foot in the latter. The average rates realized were less than those for the previous year which were Rs. 2–8–6 per cubic foot in the Nanjangud depot and Rs. 2-14-9 in the Mysore depot. Taken as a whole the total quantity of logs sold in the year under review was 127,794 cubic feet as against 154,761 cubic feet in the previous year and the average sale rate realized was Rs. 1–9–6 against Rs. 1–14–3. The profit on log trading amounted to Rs. 81,936 against Rs. 1,60,542 in 1929–30.

53. The saw mill at Chedleth having been closed on 31st March 1930, there was no production of mill-sawn timber during the year; and the trading therefore consisted mainly of the disposal of the stocks of sawn timber carried forward from the previous year.

Eighteen thousand six hundred and seventy-nine cubic feet of sawn timber were sold during the year, realizing an average of Rs. 2-8-7 per cubic foot as against 12,451 cubic feet sold at Rs. 2-6-3 in the previous year. The closing stock with the Forest Utilization Officer on 1st April 1931 was 9,466 cubic feet. The net result of the sawn timber trading was a small profit of Rs. 54–6–5 against a loss of Rs. 48,355–8–9 incurred in the previous year. The idle machinery is being cared for by a chargeman and a fitter at a cost of about Rs. 800 per annum.

54. A consignment of 1,550 cubic feet of timber was sent for the overseas market during the year bringing the total quantity available for sale abroad with Messrs. Peirce, Leslie & Co., to 6,955 cubic feet of which 4,156 cubic feet were sold overseas at an average price of Rs. 3-8-2 per cubic foot against Rs. 1-14-6 per cubic foot realized in the previous year. The consignment sales resulted in a net profit of Rs. 2,551 as against a loss of Rs. 1,608 in 1929-30.

55. On completion of the audit of the accounts of Messrs. Howard Bros., London, by the High Commissioner for India, the accounts of the firm relating to their consignment sales were finally closed with a credit balance of Rs. 1,667-4-11, representing the sale proceeds of 322 cubic feet previously consigned amounting to Rs. 1,495-14-2 and certain refunds made to the concern.

56. Sleeper operations were continued in the Kannoth range—the non-commercial area—and 3,235 broad gauge sleepers (I class) and 3,154 metre gauge sleepers (I class) were supplied to the Railways. The operations resulted in a net loss of Rs. 1,307-4-9 as against a similar loss of Rs. 1,379-13-7 in the previous year. The loss takes into account all charges including District and Forest Utilization Officer's overheads and the closing stocks at a low valuation. The cost of production of metre gauge sleepers, however, was higher than the sale rate thereby reducing the profit from broad gauge sleepers. The production of metre gauge sleepers will be restricted to the barest minimum.

57. During the year under review, all the exploitation activities pertaining to the commercial unit proved profitable, and the total profit amounted to Rs. 1,00,428 against a similar profit of Rupees 1,12,431 in the previous year.

The activities carried on by the general forest administration including the sleeper operations in the Kannoth range resulted in a net loss amounting to Rs. 33,233 against a similar loss of Rupees 18,603 in the previous year.

The net financial result of the division as a whole was a profit of Rs. 67,204 against a profit of Rs. 92,828 in the previous year.

58. The working in each year is controlled by the prescriptions of the Working Plan sanctioned for the deciduous forests of the division covering the Chedleth, the Sultans Battery and parts of the Begur ranges. A similar Plan in respect of the evergreens in the Kannoth range outside the commercial unit is under preparation. In accordance with the Working Plan prescriptions the extraction of 287,090 cubic feet was contemplated for the current year and funds for the purpose were provided in the budget with the sanction of Government to the Part II Schemes. At the commencement of the year, the question of curtailing the extraction was examined, taking into account the existence of heavy unsold stocks at the depots and the general slump in the market, and it was decided to restrict the fellings to 50,000 cubic feet of good logs to be carted to the sale depots at Mysore and Nanjangud. This curtailment will not, however, affect the revenue to be realized this year from the timber sales, as the existing stock is adequate to meet the entire demand of the current year and a part of that of the following year.

An expenditure of Rs. 65,000 is expected to be incurred on the extraction and carting of logs to the depots during the current year. The sleeper operations in the Kannoth range continue and Rs. 15,600, to be incurred on the work, has been included in the sum of Rs. 65,000 referred to above. On the revenue side, the actuals up to the end of August 1931 amount to Rs. 58,400 and the estimated revenue for the remaining months of the year is Rupees 1,80,600 bringing the total realization during the current year to Rs. 2,39,000. The revenue estimate of Rs. 1,80,600 includes the revenue of Rs. 21,000 from sleepers supplied in 1930-31, Rs. 8,000 from the sale of sawn timber stocks, Rs. 66,300 from the probable sale of 41,928 cubic feet in the Mysore depot, Rupees 47,300 from similar sales of 37,780 cubic feet in the Nanjangud depot and the balance of Rs. 38,000 from the sale of about 112,800 cubic feet in forest coupes and depots.

59. The entire mill-sawn stock is expected to be disposed of in the course of the year.

60. The Boothakal-Bavali road is being metalled at a cost of Rs. 34,000 of which Rs. 30,000 will be incurred this year. On completion of the work, this road will facilitate the transport of timber to the Mysore market.

61. As accounts on commercial lines are drawn up by the Assistant Director of Commercial Audit only at the end of the year, the results of the working according to commercial accounting are not now available for the current year.

62. During 1932-33, the extraction of logs from the three ranges of Chedleth, Sultans Battery, and Begur will be continued

and, with the greater facility for transport consequent on the improvement of the Boothakal-Bavali road, the output of Begur timber for the Mysore market will naturally increase, provided there is sufficient demand. Sleeper operations will also continue in the Kannoth range.

(*f*) *The Forest Utilization Division.*

63. Besides the ordinary accounts, *pro forma* accounts on commercial lines are also maintained for this division by the Forest Utilization Officer and audited by the Assistant Director of Commercial Audit annually. At the commencement of the year under review, the Forest Utilization Officer continued to hold control over the sale depots at Beypore, Pollachi, Olavakkot, Kasaragod and Nanjangud and the Valparai sleeper depot at Pollachi. But subsequently the control of all the log depots was transferred to the respective District Forest Officers, the Kasaragod log depot in June 1930, and all the other log depots on 1st December 1930. The Valparai sleeper depot at Pollachi too was transferred to the District Forest Officer on 1st April 1931. The Forest Utilization Officer, however, conducted the auction and other special log sales in all the depots including the one at Mysore, leaving the collection of revenue and the maintenance of accounts in the hands of the District Forest Officers from 1st December 1930. The sawn timber stocks in the various depots, however, remained in charge of the Forest Utilization Officer throughout the year.

64. As no useful purpose will be served by a comparison of the log sales effected by the Forest Utilization Officer during a part of the year—eight months—with those of the entire previous year, the sales of scantlings alone are compared with the previous year's sales in the following statement :—

Sawn timber sales effected by the Forest Utilization Officer.

Year.	Species	Quantity.	Amount.	Rate per cubic foot.
		C.FT.	RS.	RS. A. P.
1929-30 ..	Teak	59,679	1,69,426	2 13 5
	Other species ..	79,922	1,01,902	1 4 5
1930-31 ..	Teak ..	23,626	69,560	2 15 1
	Other species ..	46,579	57,489	1 3 9

All the saw mills having been closed, the mill-sawn scantlings disposed of during the year were part of the previous year's stocks.

65. According to the audited figures, the turnover of the division for the year under review was Rs. 12,43,547 showing a decrease of Rs. 45,468 as compared with the preceding year. The

total overheads of the division for the year amounted to Rupees 58,681-9-6 as against Rs. 58,329-14-0 in 1929–30. In view of the transfer of the log depots to the districts and the consequent increase in the non-commercial activities of the Forest Utilization Officer, 50 per cent of the overheads was charged to the general forest administration as against 20 per cent in the previous year, and the remaining 50 per cent was charged to the sales effected by the Forest Utilization Officer. The share of the Forest Utilization Officer's overheads charged to the sales amounted to 2·36 per cent of the total value of the sales, as against 3·62 per cent in 1929–30. This percentage was charged on all the timber sold by the Forest Utilization Officer.

66. *Overseas trade.*—Messrs. Peirce, Leslie & Co. continued to be the general agents for shipping consignments of timber overseas and also acted as agents for sales through their London branch. The question of entering into a formal agreement with the firm is under consideration. In view of the slump in the timber market, the export of logs on consignment sale was stopped during the year except for a few consignments made during the early part of the year already ear-marked during the previous year. The subjoined statement shows the sales in the overseas market during 1930–31 :—

Through Messrs. Peirce, Leslie and Company.

Species.	Quantity.	Gross amount realized.	Rate per cubic foot.	Forest Utilization Officer's and district expenses including overheads, per cubic foot.	Profit (+) or loss (—) per cubic foot.
	C. FT.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Rosewood	355	1,350 10 5	3 12 10	2 15 6	+ 0 13 4
Laurel	2,609	6,272 2 2	2 6 6	2 15 11	— 0 9 5
Haldu	118	..	..	3 14 1	— 3 14 1
Miscellaneous species.	264	319 6 0	* 1 3 4	3 1 2	— 1 13 10
Direct consignments by the Forest Utilization Officer.					
Laurel	1,929	8,246 0 0	4 4 5	2 15 6	+ 1 4 11
Rosewood	40	280 0 0	7 0 0	2 15 6	+ 4 0 6
Pillamarudu	135	540 0 0	4 0 0	2 15 8	+ 1 0 4

* Free samples, but part of the actual expenses met by the consignees.

The direct sale of 2,104 cubic feet was made to Messrs. Acme Veneer and Lumber Company and Wood Mosaic and Company, United States of America, and to Messrs. Mallinson & Sons, London; these sales proved profitable.

During the year under review, the balance of stock with Messrs. Howard Bros., Ltd., London, whose agency for the sale of Government timber overseas was terminated in 1926, was sold and the

audit of the accounts by the High Commissioner for India, London, was completed. The sale proceeds due to the various districts have been credited and the accounts with the firm have been closed finally.

An attempt was made to interest the British railways in tropical hardwood railway keys and the results are awaited.

67. The arrangement with Messrs. T. Namberumal Chetti and Sons for the sale of Government timber on a commission basis was terminated in January 1931, and the formal agreement for the agency was not executed owing to certain unacceptable modification proposed by them in respect of the terms. The outstandings are being realized with interest. In the absence of an agent, the Forest Utilization Officer made special efforts to dispose of the balance of mill-sawn scantlings cubing 48,400 cubic feet. Tenders received for the purchase were not satisfactory, and a reduced price list was introduced in the depots with fairly satisfactory results.

68. The Forest Utilization Officer and the Assistant Forest Utilization Officer continued to pass the sleepers supplied to the railways, and the full quota of 35,000 broad gauge and 50,000 meter gauge, besides 2,600 narrow gauge sleepers, was supplied to the railways during the year as against 41,231 broad gauge and 13,733 meter gauge sleepers in 1929–30. The entire revenue due from the railways for the supply has been realized. A three years' contract with the railways for the supply of a stipulated minimum number of broad gauge and meter gauge sleepers each year is under contemplation.

69. Efforts were made to interest the Jail and the Public Works departments in indenting upon the Forest department for their requirements of logs and 3,463 cubic feet of teak logs were supplied to the Central Jails at Coimbatore, Trichinopoly and Cannanore. Messrs. Binny & Co. were supplied with 6,939 cubic feet of teak logs and 932 cubic feet of junglewoods, the realization from the sale being Rs. 27,719. Negotiations with private parties resulted in the disposal of large stocks of teak and xylia from the Beypore depot.

70. The Forest Utilization Officer arranged for the supply of specimens of various species for timber tests under the several projects undertaken by the Forest Research Institute, Dehra Dun. Arrangement was also made for the supply of five tons of eta bamboo to the Forest Research Institute, Dehra Dun, in connexion with an experiment on paper manufacture.

71. Literature on minor forest products continued to be collected and recorded in the ledger files.

The policy of introducing lac in suitable areas was under the supervision of the Deputy Forest Utilization Officer, an Extra Assistant Conservator, until the abolition of the post on 1st October 1930, and continued to be handled by the same Extra Assistant Conservator under the Conservator, Fifth Circle. During the year under review, lac experiments were carried out in Central Salem, North Coimbatore, Madura and Palghat divisions.

72. The future activities of the Forest Utilization division will be in the nature of those of a centralized selling agency. The present control by the Forest Utilization Officer over the sawn timber stocks in the depots will cease with the disposal of the unsold balance on hand, and thereafter he will be concerned mainly with the conduct of log sales at the depots, organization of sleeper supply, sleeper passing, and realization of the revenue therefrom, arrangement for the sale of good logs in special markets, to the railways, Government departments, etc., handling of all overseas sales, study of the market conditions and the requirements of the various localities, correspondence relating to minor forest products, arrangement of supply of specimens for tests, or identification at the Forest Research Institute, Dehra Dun, and technical advice on matters relating to timber, minor forest products, etc.

73. For the present and future duties of the Forest Utilization Officer, the maintenance of *pro forma* accounts and commercial audit for this division can serve no useful purpose and the question of their discontinuance is under consideration.

(*g*) *Saw Mills and Extraction division.*

74. With the closure of the saw mills and the termination of the contract of the Forest Engineer, Major Chipp, the Saw Mills and Extraction division, Olavakkot, was closed in April 1930. The mills were handed over to the districts and the Valparai sleeper project was transferred to the District Forest Officer, South Coimbatore. The Central Stores, Olavakkot, has been taken over by the Forest Engineer, Coimbatore.

IV.—SILVICULTURE.

75. Natural regeneration was fairly satisfactory in most districts; but, as usual, it was found that, after satisfactory germination of seed in the rainy weather, many seedlings wilted and died during the dry hot season of the year. In the case of artificial regeneration, the same conditions resulted in a certain amount of disappointment in the case of sowings, but, where planting of seedlings or stumps, as in the case of teak, was followed by a sufficient number of days of favourable weather, results were satisfactory.

76. Sandal is spreading naturally in several districts and there is very little doubt that, in the Presidency as a whole, this species is on the increase, in spite of the ravages of spike disease in certain localities. In recent years our knowledge of the silviculture of sandal and of the best means of raising it artificially has increased appreciably. A useful pamphlet embodying the latest information, notably with regard to the method of sowing in dumps, which has met with success in North Salem, has been drawn up; it is hoped to print it and distribute it widely in the near future.

77. It is gratifying to note that, in various districts, steps were taken towards improving the stocking in fuel coupes.

Prescriptions with this end in view find place in several recent Working Plans and it is felt that the principle of collecting debris after felling and burning it in heaps or lines and thereafter sowing seeds of suitable species must be a sound one. In some of the reports received, there is a dearth of information regarding the results of this practice. Especially in the case of such operations as this one, where the work is still in the experimental stage, it is desirable each year to indicate in some little detail what the results, both negative and positive, are up to date.

A further area of 1,220 acres in the sandy Kudiraimoliteri reserve of Tinnevelly was sown up with palmyra ; the results are reported to be satisfactory up to date.

78. In the Nilgiris considerable damage was caused by frost. Parts of a plantation of *Eucalyptus pillularis* which gave great promise up to Christmas were virtually wiped out in spite of elaborate precautions being taken to protect the plants.

79. Now that so many important forests are covered by Working Plans, thinning and tending are matters of routine which receive regular attention. Reports indicate that more attention is being paid to climber cutting in areas not actually under regeneration. This is satisfactory so far as it goes, but general remarks to the effect that subordinates cut climbers whilst on patrol are not altogether convincing. The instructions are that systematic programmes for climber cutting by subordinates are to be drawn up. Nothing very ambitious in the way of area need necessarily be insisted upon, but what is essential is that the work should be capable of check and that it should be inspected and reported upon.

80. Excellent teak plantations of the second rotation were raised at Nilambur. In Wynaad, where the raising of teak plantations is often difficult, an initial stocking of 78 per cent was obtained in Begur range, whereas in Chedleth range the stocking was 84 per cent: this latter plantation promises to be one of the best raised so far in Wynaad. In Mount Stuart, the 1930 teak plantation

suffered severely from want of timely rain and, for a similar reason, the percentage of initial success at Walayar was rather disappointing.

81. A full and very interesting report on the year's work on silvicultural research is printed separately.

82. Very satisfactory results have been obtained in restocking artificially many of the gaps resulting from selection fellings in the evergreen forests in Tinnevelly. In the Silent Valley in Palghat division, many of the Acrocarpus which came up so well in the gaps originally have died off. A very high percentage of initial success was, however, obtained from the 1930 sowings and it may prove that a more judicious choice of the larger gaps, based on past experience, will result in the definite establishment of the artificial regeneration. In the meantime no anxiety is felt about the natural regeneration in the evergreen forests, though much remains to be learnt about the possibility of stimulating the growth of young plants in the early years.

V.—GENERAL ADMINISTRATION.

(i) ALTERATION IN AREA.

83. About 4 square miles were disreserved, of which half a square mile in the Central Salem division was for assignment to Koravas and another half square mile in the Madura division was for assignment to the depressed classes for cultivation. One square mile in Central Salem was disreserved and handed over for cultivation. There was a total decrease of about 5 square miles in the Lower Godavari, Nellore, Anantapur, Cuddapah North, Kurnool, East and South Salem divisions due to recomputation of areas. About 9 square miles were added by rectification of areas principally in the Lower Godavari, Nellore and Anantapur divisions. The net result was that there was no alteration in the area of Reserved Forests, which, at the beginning and at the end of the year, was 18,963 square miles.

84. About 47 square miles were newly declared Reserved Lands while no area was excluded. About 34 square miles were added to the extent of Reserved Lands by rectification of areas in the Anantapur and West Kurnool divisions. There was thus an increase of 81 square miles in the area of Reserved Lands, which stood at 350 square miles at the close of the year.

85. Three thousand three hundred and forty-one square miles of Reserved Forests were under panchayat management during the year against 3,383 square miles in the previous year. These forests are under the control of the Revenue Department. The

decrease is due to the resumption of ryots' forests by the Forest department in the following divisions:—

	SQ. MLS.
Eight Eastern Nallamalai blocks, Kurnool East ...	38
Chennupalle Reserved Forest, Cuddapah North ...	6
Karapet Reserved Forest, Chittoor	1
Mallur Reserved Forest, South Salem	1
Total ...	46
Deduct increase due to adopting resettlement figures for some Reserves in Anantapur division and rounding off the areas of Departmental and Ryot's forests in North Salem	4
Net decrease ...	42

(ii) FOREST SETTLEMENT.

86. The area under settlement at the commencement of the year was 57·32 square miles to which an area of 46·96 was added during the year. These settlement operations were in progress over an area of 104 square miles. No area was finally settled during the year.

The selection and demarcation of blocks for reservation in he Rampa Agency was continued during the year and is nearing completion. The settlement of blocks already notified under section 4 of the Madras Forest Act is in progress. There are still eight more blocks to be notified under section 4 of the Madras Forest Act.

In South Mangalore also the settlement of the blocks notified under section 4 of the Madras Forest Act is in progress.

(iii) DEMARCATION.

87. A total length of 234 miles of boundaries was demarcated (chiefly in Ganjam, Lower Godavari, North Salem, Kollegal, North Coimbatore, Madura and Wynaad divisions) at a cost of Rupees 8,584, eight miles in Wynaad being done by subordinates free of cost. A total length of 16,847 miles of boundaries was kept in repair at a cost of Rs. 6,323. At the close of the year, 335 miles of boundary lines remained to be demarcated, chiefly in the Kollegal, North Coimbatore and Madura divisions.

(iv) SURVEY.

88. A Survey of India Party undertook the survey on a scale of 4 inches to a mile of Galleri extensions in Ganjam towards the close of the year and a topographical survey on a scale of one inch to a mile was carried out in the Bhadrachalam taluk in the Upper Godavari division. Another party surveyed part of South Arcot and Salem districts on a scale of one inch to a mile, while the survey of Aranha and Thirthagiri Reserved Lands was done by them on a scale of 4 inches to a mile. In South Salem, the topographical survey of Vedambium, Veppadi, Vengamudi, Vangarai, Periasholai, Gundur, Poolambadi, Ariyalur, Attur-Manmalai, Adukkam-Pudukkombai, Perumalmalai and Bailnad was carried out.

89. The Madras Survey Party completed the resurvey of Omalur and Salem taluks during the year. The survey of Harur taluk in Central Salem is in progress. In South Salem, the survey of boundaries of Reserved Forests adjoining patta holdings was completed during the resurvey of Rasipur and Namakkal taluks. The survey of Bailnad, Adukkam-Pudukkombai and Perumalmalai Reserved Lands was nearing completion at the close of the year. The survey of the area on the Anamalais, disreserved for cultivation of plantation products, was undertaken in January 1931. The Madras Survey Party continued its work in the South Mangalore division.

(v) ROADS AND COMMUNICATIONS.

90. The construction of the road from Karulai to Nedungayam, which was the only work of magnitude, was continued during the year. The formation of the road was completed and the construction of the bridge across the Cherupuzha was also practically completed. Rs. 35,724 was spent in the year. The work was done by the Forest Engineer.

The total expenditure on new works was Rs. 54,439 and on repairs Rs. 1,12,526 as against Rs. 88,872 and Rs. 88,129 respectively incurred in 1929–30.

Fifty-five miles of new roads were constructed and 2,116 miles of roads were repaired as against 101 miles and 1,974 miles respectively in the previous year.

It is satisfactory to note from certificates furnished by Conservators that important roads were kept in a fair state of repair.

(vi) BUILDINGS.

91. No new work of any magnitude was undertaken during the year. Only miscellaneous buildings such as inspection sheds, range offices, subordinates' quarters and rest-houses were constructed in various divisions.

The total expenditure on buildings amounted to Rupees 75,204 for new construction and Rs. 80,419 for repairs or a total of Rs. 1·56 lakhs as against Rs. 1·55 lakhs in the previous year. There is thus no appreciable difference in the total expenditure incurred in the two years.

(vii) OTHER WORKS.

92. The total amount spent during the year on the construction and repair of wells, tanks, etc., amounted to Rs. 11,135 as against Rs. 12,578 in the previous year.

93. *Improvement of water-supply in grazing grounds.*—A sum of Rs. 1,817 was spent on the improvement of water-supply in grazing grounds. Work of this kind was undertaken in most of the divisions except those in the Northern Circars and the West Coast divisions where there are sufficient facilities for watering cattle. As usual, the improvements consisted of repairing existing tanks and wells and constructing new ones. The public were also permitted to repair existing water-sources and to construct new wells and tanks at their own cost and this permission was utilized chiefly in Guntur where seven tanks inside Reserves were repaired.

(viii) LIVESTOCK.

(*a*) *Elephants.*

94. The number of elephants on the books at the beginning of the year was 121 valued at Rs. 2,89,304. During the year, 25 elephants were captured as in the previous year and 5 calves were born. Eight elephants including 3 new captures were sold for Rs. 5,330; seven including two calves died, one was destroyed on account of blindness, one calf escaped and two were presented to a zoological garden in Australia. The number on the books at the end of the year was 132 valued at Rs. 3,08,954.

95. Elephant-capturing operations were conducted as usual in the South Coimbatore, the Nilgiris, the Wynaad and the Nilambur divisions and also in the Palghat division. Twelve animals were captured in South Coimbatore, 5 in the Nilgiris, 4 in the Wynaad, 2 in Nilambur and 2 in Palghat. The cost of the operations was Rs. 7,033 as against Rs. 6,556 in the previous year.

Besides the above captures, there were nine other falls of elephants in the Sixth Circle. Of these three grown up tuskers and one calf escaped, two young calves were released to join the herd near by, two calves were destroyed and one cow elephant died after enkraalment. On one occasion in the Nilgiris division, a forest guard and one or two Kurumbars, having located a herd of elephants beside the Moyar river, drove them very slowly for about a mile down the bank of the river to a ford opposite which was a row of elephant pits. When the elephants entered the water at the ford, the Forest Guard stampeded them with the result that seven of the elephants fell into pits.

(*b*) *Cattle.*

96. Forty-five buffaloes, bullocks and asses valued at Rupees 3,394 were in stock at the beginning of the year. During the year six buffaloes were sold and no new animals were purchased. The balance at the end of the year was 39 valued at Rs. 2,914.

(ix) BREACHES OF THE FOREST ACT.

97. The following table shows the forest offences of all kinds during the year as compared with those of the previous year.

Cases	Injury to forests by fire.		Unauthorized fellings.		Unauthorized grazing.		Other offences.		Total.	
	1929-30.	1930-31.	1929-30.	1930-31.	1929-30.	1930-31.	1929-30.	1930-31.	1929-30	1930-31.
RESERVES.										
Cases taken to Court	20	14	2,691	4,343	739	1,088	295	206	3,745	5,651
Cases compounded	24	28	7,777	5,708	2,342	2,082	830	610	10,973	8,428
Cases undetected	691	969	248	190	24	15	15	4	978	1,178
Total ..	735	1,011	10,716	10,241	3,105	3,185	1,140	820	15,696	15,257
UNRESERVES.										
Cases taken to Court	29	66	693	1,499	26	297	53	105	801	1,967
Cases compounded	136	75	5,946	6,166	88	628	541	554	6,711	7,423
Cases undetected	1	32	129	112	5	..	2	7	137	151
Total ..	166	173	6,768	7,777	119	925	596	666	7,649	9,541
TOTAL RESERVES AND UNRESERVES.										
Cases taken to Court	49	80	3,384	5,842	765	1,385	348	311	4,546	7,618
Cases compounded	160	103	13,723	11,874	2,430	2,710	1,371	1,164	17,684	15,851
Cases undetected	692	1,001	377	302	29	15	17	11	1,115	1,329
Grand Total ..	901	1,184	17,484	18,018	3,224	4,110	1,736	1,486	23,345	24,798

In the case of Reserved Forests, there was no appreciable difference in the total number of offences reported. There was an appreciable increase (37·5 per cent) under fire owing to the unusually severe hot weather and to incendiarism by graziers.

98. Of the 5,556 cases from Reserved Forests, which were disposed of by the magistrates, in 3,478 cases the accused paid the compounding fees in court at the last moment and the balance of 2,078 cases proceeded to trial. Of these conviction was secured in 1,873 cases, the percentage of conviction being 90.

99. A sum of Rs. 1,93,077 was realized as compounding fees against Rs. 1,99,238 in the previous year. The average compounding fee for each case was Rs. 14–7–1 and for each accused Rupees 7–4–9 as compared with Rs. 12–14–6 and Rs. 6–12–8, respectively, in the previous year.

100. Investigation by District Forest Officers and Range Officers into cases of forest offences was on the whole slightly better than in the previous years, but there is still considerable room for improvement. The District Forest Officers of Ganjam and South Coimbatore held no enquiries at all. Investigation by Range Officers was unsatisfactory in Guntur, Nellore, Anantapur, Vellore, Central Salem, Madura, Tinnevelly and the Nilgiris. A certain number of cases of sandalwood theft were detected in the Second, Fourth, Fifth and Sixth Circles.

101. It is satisfactory to be able to record that the Railway and Police officials continued to render valuable assistance in connexion with sandalwood offences and that they were granted liberal rewards. It is also noted that subordinates who acted with courage and honesty as well as members of the public who co-operated in the detection of important forest cases have been rewarded.

102. Proposals for the improvement of the existing sandalwood transit rules are still under the consideration of Government.

103. Surprise inspections and special secret patrols were arranged in all circles with satisfactory results, particularly in the Second Circle.

(x) PROTECTION FROM FIRE.

104. Early-burning was carried out in the Second, Fifth and Sixth Circles. The total area dealt with under this system was about 922 square miles, the recorded expenditure being Rs. 3,840 or Rs. 4–2–1 per square mile. Eleven square miles were subsequently burnt, that is to say, were burnt twice. It is presumed that the instructions given in the previous year's report, namely, that early-burning should be restricted to areas in which the operation can be properly controlled, are being followed.

105. The area over which special fire protection was attempted was 4,108 square miles, of which 372 square miles (9·05 per cent) were burnt subsequently by forest fires, the corresponding figures for the previous year being 4,186 square miles, 349 square miles and 8·3 per cent respectively. The bulk of the damage by fire was, as usual, in the First Circle, the percentage of the area burnt being 20 against 18 in the previous year. About 286 square miles were burnt of which not less than 101 square miles were in Nugur range of Upper Godavari. The expenditure on special protection during the year was Rs. 31,415 or Rs. 7–10–0 per square mile as against Rs. 34,346 or Rs. 8 per square mile in the preceding year.

106. Rewards amounting to Rs. 1,529 (as against Rs. 3,214 in the previous year) were distributed to the Khonds in Ganjam, to the Koyas and Reddis of Upper Godavari and to the settlers in the Peddapur Agency in Lower Godavari for assistance given in fire-protection.

107. As stated in the previous year's report, the practice of closing to grazing areas which have been burnt is not followed to the extent to which it should be. Considering the number of forest fires that are known to have occurred during the year, the number of cases in which closure to grazing has been reported is very few. There has been more than one case in which proposals for closure made by forest officers have been vetoed, owing to a feeling that inconvenience would be caused to the cattle-owners. It is felt strongly that the temporary inconvenience of a portion of the community held jointly responsible for damaging its own interests should not stand in the way of exercising the right of closure and this feeling has been brought to the notice of Government.

(xi) PROTECTION AGAINST INJURIES FROM NATURAL CAUSES.

108. In the Nilambur division, damage by teak defoliators continued and a special duty forester was employed for the collection of statistical data. The problem is being investigated by the Forest Entomologist, Dehra Dun.

109. Bison caused damage to young sandal trees in sandalwood areas in the Fourth Circle.

Pigs continued to cause damage to young teak plantations in the Wynaad division. They also caused some damage in a small plantation of the second rotation in Amarampalam Reserved Forest.

Sambhur did a great deal of damage to young teak in Kalakad and Mundanthorai (Tinnevelly). Deer together with grazing animals destroyed completely all sandal regeneration not protected by thorny bushes in the sandalwood areas of Sigur range.

Elephants continued to do considerable damage to teak in Vannathiparai (Madura), in the Alagarkoil Valley (Tinnevelly), in some of the Mount Stuart plantations (South Coimbatore), in some of the young plantations in Amarampalam range (Nilambur) and in the Mudumalai range (the Nilgiris).

110. In South Cuddapah, Strobilanthus was uprooted by the subordinates and in Tinnevelly, by contractors while working fuel coupes.

The destruction of prickly-pear by the cochineal insect was tried in the Guntur and Nellore divisions and in all divisions of the Fourth and Fifth Circles with success. It is considered that the introduction of this insect to Reserved Forest should be made with discretion. In certain localities the appearance of prickly-pear indicates the first step taken by Nature to restore an area ruined by man and his activities. Broadly speaking, Nature's efforts should only be frustrated when there is a definite expectation that something better than prickly-pear will take its place either naturally or with the help of artificial sowing or planting.

111. Spike disease in sandal trees was found to be spreading in the Yelagiris of the Vellore division and in the Kollimalais and Pachamalais of the South Salem division. Fresh attacks of spike were noticed near Bailur in Kollegal. In the Sigur range, the disease which broke out in 1928 continued to spread. The Indian Institute of Science, Bangalore, with the assistance of local officers, continued to investigate the cause of this disease and investigation on the entomological side was carried on by the Forest Research Institute. No practical conclusions have yet been reached with regard to the extermination of spike.

(xii) FOREST PANCHAYATS.

112. The working of the Reserved Forests handed over to panchayat management is reported on by the Board of Revenue in whom their management is vested. All the forests classified as fit for that purpose have been handed over to panchayats, the total area being 3,341 square miles.

In South Salem, an area of 729 acres in Mallur Reserve, which was originally placed in class III, was permanently retransferred to class I and resumed by the Forest Department as it contains a good growth of sandal and as the panchayat was unable to protect it efficiently. Eight Eastern Nallamalai blocks in Kurnool East were resumed by the Forest Department on the ground that they formed part and parcel of the Eastern Nallamalais. Karapet Reserved Forest in Chittoor which was originally placed in class III was retransferred to class I and was resumed by the

Forest Department as the panchayat refused to continue its management, and Chennupalle Reserved Forest in Cuddapah North had to be resumed as no panchayat could be formed for it. In Nellore, the Forest Department resumed control over the Tirumalapadu Reserved Forest as the ryots adjoining the reserve objected to its management by panchayat.

113. The Forest Village system was confined to South Kanara and worked satisfactorily in North Mangalore. In South Mangalore, the only panchayat which was in existence did not work well and had to be dissolved. Earnest efforts were made by the District Forest Officers to form panchayats in South Kanara, but the villagers refused the offer on trivial grounds. The disinclination of the people to form fresh panchayats is obviously due to the fact that the people feel assured that Government will not withdraw the forest concessions which amply cater for most of their agricultural requirements and naturally they do not wish to be saddled with the obligations imposed by the formation of panchayats. In fact, as already stated in the previous year's report, the formation of panchayats will be impossible so long as the people are able to indent freely upon the forests for their principal wants without being fettered by any obligations.

(xiii) FOREST COLLEGE.

114. Mr. J. C. Wrench continued as Principal of the College throughout the year. Sixteen students passed out in 1931; of these, six were from the Central Provinces, two from Bombay, two from the Nizam's Dominions, two from Indore State, two from Rewa State, one from Bonai State and one from Bamra State. No student obtained Honours, but all students secured Higher Standard certificates. The examination results were satisfactory. No Government students were deputed either for the 1930–32 course or for the 1931–33 course. For the latter course ten Government students were recommended for training to meet the requirements of the department. Government, however, were not pleased to sanction the proposal, pending an investigation of the College affairs by the Retrenchment Committee. The result of this is expected to be a shortage of trained men in the near future, which will prove a very great handicap to the forest administration.

(xiv) VERNACULAR TRAINING SCHOOLS.

115. During the year only one Vernacular Training School was held and that was at Palghat in the Sixth Circle. Three subordinates from the Fourth Circle and 10 from the Fifth Circle were trained at the school.

(XV) FINANCE.

116. The total revenue, excluding the results of Government commercial undertakings, amounted to Rs. 45·24 lakhs and the total expenditure to Rs. 42·76 lakhs. The cash surplus was thus 2·48 lakhs. Adding the net profits on the commercial undertakings (1·82 lakhs), the surplus is Rs. 4·30 lakhs, as compared with Rs. 15·35 lakhs in the previous year, 13·86 lakhs in 1928–29 and Rs. 3·37 lakhs in 1927–28.

117. There was a decrease of Rs. 5·49 lakhs in the revenue from sandalwood due to a marked decline in price on account of trade depression—this was already forecasted in paragraph 9 of the previous year's report. The total revenue from forest produce removed by Government agency decreased by Rs. 6·50 lakhs. Apart from sandalwood, there was a decrease under timber (0·72 lakh) due to the slump in the timber market. The revenue from produce removed by consumers and purchasers decreased by 5·28 lakhs due to want of demand and lower prices realized for bamboo coupes, Tangedu and Rela barks, Nux vomica and other items of minor forest produce. There was also a decrease of 0·40 lakh in grazing revenue due partly to the smaller number of cattle grazed during the year as a result of cattle mortality by epidemic diseases and partly to the non-sale of some kanchas in Nellore.

118. Expenditure on works decreased by 1·94 lakhs principally on account of the withdrawal of part of the working capital of the Mount Stuart and Nilambur commercial concerns and the abandonment or postponement of works on account of financial stringency. There was a decrease of 0·85 lakh on pay and allowances due to further retrenchment by the abolition of the posts of Chief Forest Engineer and the Deputy Forest Utilization Officer with effect from 28th May 1930 and 1st October 1930 respectively.

119. The following trading account exhibits the financial position of the department for the year and shows the net profit to be 3·11 lakhs:—

I. Trading Account.

	LAKHS. RS		LAKHS. RS.
Value of timber, etc., in depots on 31st March 1930.	5·05	Value of timber, etc., in depots on 1st April 1931.	8·43
Value of tools and plant on 31st March 1930.	9·74	Value of tools and plant on 1st April 1931.	10·45
Revenue outstandings on 31st March 1930.	11·92	Revenue outstandings on 1st April 1931.	7·87
Working expenditure of the year (excluding capital expenditure).	41·46	Revenue of the year	45·24
Good debts (advances) on 31st March 1930.	0·27	Profits on commercial undertakings (as below).	1·82
Gross profit	5·62	Good debts (advances) on 1st April 1931.	0·25
Total ..	74·06	Total ..	74·06

II. Interest.

	LAKHS. RS.
(1) Capital expenditure up to the end of 1929–30 (excluding commercial concerns)	35·27
Capital expenditure during 1930–31	1·30
	36·57
(2) Interest on capital expenditure during 1930–31 at 5·44 per cent	1·9

III. Depreciation.

(3) Depreciation on tools and plant at 5 per cent	0·52

IV. Profit and Loss Account.

Gross profit as per Table I	5·62
Deduct interest and depreciation (1·99 plus 0·52)	2·51
Net profit ...	3·11

120. The financial results of the year's working of the commercial concerns of Mount Stuart and Nilambur were—

	RS.
Mount Stuart	— 3,704
Nilambur	1,85,509

Together the two concerns showed a profit of Rs. 1·82 lakhs.

121. No credit is taken for free grants of grazing and other produce (0·66 lakh) or on account of the protection of irrigation sources and other national interests. On the other hand, general pension charges, the cost of stationery and other small items are omitted from the account.

(xvi) GENERAL.

122. As usual the Forest Department continued to protect the jungle tribes by providing them with work for their livelihood and by granting them lands rent-free for cultivation on annual leases in some districts, notably in North Coimbatore, Palghat and Wynaad, in return for the protection of forests. They are employed on various kinds of forest work suited to them and are paid fairly. Generally, with the progress made in providing them with work and with lands for cultivation, their tendency towards shifting (Podu or Ponakad) cultivation has been gradually diminishing. Nowadays it is possible, in some places, to combine the raising of plantations of trees with this form of temporary cultivation to the mutual advantage of the jungle tribes and the forests.

123. The Khonds of Ganjam continued to be on good terms with the department. The Koyas and Reddis of Upper Godavari and the hill tribes of Lower Godavari were employed on departmental works and were granted rewards for successful fire protection. In Nellore the Yenadis of Sriharikota were as usual

employed on the collection of minor forest produce. In addition to their wages, they were granted rewards in the shape of money, cloth and rice. With a view to prevent them squandering their savings, they were persuaded to invest them in the Post Office Savings Bank and to withdraw them only in times of real need and with the permission of the District Forest Officer. The Yenadis readily agreed to this arrangement, which has been working well. Government have been addressed to regularize the system.

124. The reclamation and administration of the Chenchus of Kurnool was carried on by the special organization under the control of the Collector. The Chenchus continued to enjoy certain forest concessions granted at the time of the original Forest Settlement. They were employed by the Forest Department in various kinds of forest operations and also by contractors. Some of them were employed as headmen of Chenchu gudems, as forest guards, watchers and Chenchu schoolmasters.

A sum of Rs. 28,635 was spent on the reclamation of the Chenchus against Rs. 26,922 in the previous year. On the whole, they are slowly developing an inclination to adopt peaceful and settled habits, although they have made no appreciable progress in agriculture. There were three industrial schools at the commencement of the year, but they had to be closed during the year, as they were not attended by a sufficient number of boys. There were twenty schools including a girls' school and five scholarships were granted to deserving boys. Their health was generally satisfactory except for sporadic outbreaks of cholera and smallpox. Venereal disease, which has all along been a curse amongst the Chenchus, has been treated by Salvarson injections with markedly successful results.

125. The Land Revenue administration of the Malayali villages on the Javadis by the District Forest Officer was carried on successfully as in the past.

The Hill Village system continued in force in the hill villages on the Javadis in the Vellore division and in the Chitteris in Central Salem division. Refunds of grazing fees for satisfactory protection of Reserves and maintenance of Reserve boundary lines and special rewards for protection of Reserves from fire were granted. In Central Salem the system has not worked satisfactorily in three out of eight reserves and the refund of grazing fees was therefore withheld.

In South Salem the co-operation of the Malayalis on the Kollimalais and Pachamalais was enlisted under the Fire Reward system and they supplied labour for departmental works on the hills and protected the forests from fires.

126. The Kudubis in North Mangalore provided labour for fire protection and the manufacture of cutch as in previous years. The Kurumbars in the Wynaad, the Nilgiris and Palghat, the Kasubas in the Nilgiris, the Irulars in the Nilgiris and Palghat and the Sholagas of North Coimbatore also supplied labour to the department and were given lands for cultivation when this was found desirable. The Marattis and Malebudris continue to practise shifting cultivation in the unreserves of Kasaragod taluk, but their activities in this respect are decreasing. The Puliyans in Madura were utilized in connexion with the cultivation of lac. In Tinnevelly, arrangements have been made to lease land to form a Kani settlement in the neighbourhood of Kannikatti.

127. The health of the subordinate executive staff was as usual bad in the Agency tracts and in the Sriharikota range in Nellore. Two Foresters, two Forest Guards and three watchers died of malaria in the First Circle. In the Second Circle the health of the staff suffered much from malaria in all the hill tracts of the Kurnool district and in the Palakondas and Nallamalais of North Cuddapah. In this circle three Foresters and two Forest Guards died of malaria. In the Third Circle the staff suffered less from malaria than previously owing to careful anti-malarial measures taken by the superior staff. In the Fourth Circle malaria was virulent in the hill tracts and three Foresters, and two Guards and three watchmen died of it. In the Fifth Circle two Guards died of malaria in Kollegal. Special anti-malarial measures were taken at Topslip in South Coimbatore. In the Sixth Circle the health of the staff suffered much on account of malaria which claimed two victims in Wynaad. Throughout the Presidency the clearing of growth around all forest stations and rest-houses was insisted upon with a view to improving the general sanitary condition and allowing a free circulation of air. The need for reducing the number of mosquito-breeding places was not lost sight of but the fight against malaria, in centres of forest work which are constantly changing, is necessarily an uphill one.

Three Forest Guards and two watchers were murdered when discharging their duties.

128. The relationship between the Forest and Revenue Departments was friendly and cordial throughout the Presidency.

129. The Chief Conservator wishes to record his appreciation of the loyal support received from all ranks of the service. In spite of the difficult times through which the Forest Department in common with all others has been passing, he has noticed no flagging in the interest taken in the work by all ranks.

A. WIMBUSH,
Acting Chief Conservator of Forests.

APPEN

Appendix A.—Comparative statement of number and origin

District.	A. Fires caused by accident or through carelessness in burning fire lines.		B Fires entering forests by crossing exterior fire lines.		C. Fires beginning inside the Owing to carelessness or accident. By workmen engaged in the forests or by purchasers of forest produce and by hay-cutters.		By villagers, travellers, etc., passing through the forests.		By railway engines.		By lightning or by fire balloons.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
First Circle.												
Ganjam	1	30	32	20,676	2	5	35	10,900	..	..	..	..
Vizagapatam ..	..	..	9	3,026	5	1,475	19	5,056	..	..	..	..
Godavari, Upper.	1	2	11	16,236	1	5,523	17	32,218	..	..	..	..
Do. Lower.	.	..	1	1	14	1,353	26	2,377	..	..	..	..
Guntur	..	..	..	..	2	1	17	862	..	..	..	..
Nellore	..	..	3	160	8	1,310	8	2,336	..	..	..	..
Total ..	2	32	56	40,099	32	9,667	122	53,749	..	..	..	..
Second Circle.												
Anantapur ..	...	..	..	..	5	2,300	9	2,093	5	1,750	..	..
Kurnool, East ..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South..	1	1	..	..	3	255	3	1,250	..	..	..	..
Do. West ..	..	..	..	..	..	..	5	1,425	..	..	..	..
Cuddapah, North.	..	..	11	15,215	1	940	10	4,689	..	..	..	..
Do South.	1	4	2	540	15	3,366	13	1,348	..	..	..	..
Total ..	2	5	13	15,755	24	6,861	40	10,805	5	1.750	..	..
Fourth Circle.												
Chittoor	..	..	..	..	..	..	..	..	..	..	..	..
Vellore	..	..	1	844	..	..	4	80	..	..	10	274
Salem, North ..	..	..	10	4,380	..	..	6	908	..	..	..	..
Do. Central ..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	11	5,224	..	..	10	988	..	..	10	274
Fifth Circle.												
Kollegal	..	..	8	3,150	3	450	11	2,165	..	..	..	..
North Coimbatore	..	..	3	2,140	..	..	44	4,399	..	..	..	..
South do.	4	176	1	100	2	94	11	456	..	..	..	..
Madura	3	2,505	7	356	1	80	7	162	..	..	..	..
Tinnevelly ..	..	..	26	2,346	1	2	..	..	..	..	4	153
Total .	7	2,681	45	8,092	7	626	73	7,182	..	..	4	153

Note.—One case of setting fire for the purpose of turning out game (catching lizard), noted in column 16

DICES.

of fires that occurred during the calendar year 1930.

reserves or fire-traced areas.

By intentional firing.						Total of C.		Causes unknown.		Total of A, B and C and causes unknown.	
In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.							
Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
4	781	..	..	..	..	41	11,686	35	27,982	109	60,374
2	730	..	..	..	..	26	7,261	..	..	35	10,287
6	27,661	22	77,130	4	493	50	143,028	5	3,710	67	162,976
..	..	..	..	..	..	40	3,730	35	3,613	76	7,344
..	..	1	1	..	..	20	864	7	2,025	27	2,889
3	420	..	..	1	60	20	4,126	2	185	25	4,471
15	29,595	23	77,131	5	553	197	170,695	84	37,515	339	248,341
1	30	..	..	..	..	20	6,173	4	1,975	24	8,148
..	..	..	..	1	232	1	232	..	..	1	232
2	250	..	..	..	..	8	1,755	..	..	9	1,756
6	443	2	70	..	..	13	1,938	1	500	14	2,438
17	18,095	..	..	33	26,675	61	50,399	4	950	76	66,564
20	8,939	2	391	14	2,599	64	16,643	11	6,689	78	23,876
46	27,757	4	461	48	29,506	167	77,140	20	10,114	202	103,014
32	1,600	..	..	..	..	32	1,600	19	3,180	51	4,780
76	3,539	..	..	1	220	91	4,113	7	130	99	5,087
..	..	..	..	..	..	6	908	51	22,663	67	27,951
..	..	..	..	..	..	..	..	40	2,503	40	2,503
..	..	..	..	..	..	..	..	55	1,377	55	1,377
108	5,139	..	..	1	220	129	6,621	172	29,853	312	41,698
26	21,172	..	..	1	85	41	23,872	41	17,080	90	44,102
23	4,909	..	..	1	10	68	9,318	67	8,185	138	19,643
10	241	1	3	1	10	25	804	3	269	33	1,349
26	1,262	..	..	..	..	34	1,504	90	3,564	134	7,959
14	1,168	..	..	23	1,698	42	3,021	11	1,409	79	6,776
99	28,752	1	3	26	1,803	210	38,519	212	30,507	474	79,799

of Cuddapah South division has been detected and compounded for Rs. 10.

Appendix A.—Comparative statement of number and origin

District.	A. Fires caused by accident or through carelessness in burning fire lines.		B. Fires entering forests by crossing exterior fire lines.		C. Fires beginning inside the forests. Owing to carelessness or accident.							
					By workmen engaged in the forests or by purchasers of forest produce and by hay-cutters.		By villagers, travellers, etc., passing through the forests.		By railway engines.		By lightning or by fire balloons.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Sixth Circle.												
Mangalore, North	..	..	8	102	2	123	29	970	..	..	..	..
Mangalore, South	10	185	16	455	..	..	15	421	..	..	..	..
Wynaad	..	..	4	3,490	..	..	4	228	..	..	..	..
Nilambur ..	1	1	3	27	..	..	1	1	..	..	..	..
The Nilgiris ..	..	..	1	1,200	..	..	11	4,410	1	234	..	..
Palghat	1	25	2	908	5	416	2	100	..	..	..	..
Total ..	12	211	34	6,182	7	539	62	6,160	1	234	..	..
Parlakimedi Maliahs ..	..	..	..	..	..	..	6	631	..	..	..	..
Grand Total, Presidency ..	23	2,929	159	75,352	70	17,693	343	79,545	6	1,981	14	427

of fires that occurred during the calendar year 1930—*cont.*

reserves or fire-traced areas.

By intentional firing.											
In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.		Total of C.		Causes unknown.		Total of A, B and C and causes unknown.	
Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
6	1,278	1	20	1	20	39	2,411	11	539	58	3,052
..	..	3	225	1	50	19	696	45	1,852	90	3,188
..	..	..	..	1	300	5	528	19	4,793	28	8,811
..	..	..	..	..	..	1	1	1	2	6	31
1	200	..	..	1	200	14	5,074	45	3,135	60	9,459
6	2,045	..	..	1	4	14	2,565	28	2,128	45	5,626
13	3,523	4	245	5	574	92	11,275	149	12,499	287	30,167
..	..	..	..	..	..	6	631	26	4,715	32	5,347
284	90,766	32	77,840	85	32,656	804	304,881	663	125,203	1,646	508,366

APPENDIX B.—Comparative statement of impounded cattle during 1930–31.

District.	Number of cattle impounded.		Average for three years ending 1929–30.
	1929–30.	1930–31.	
First Circle.			
Ganjam	2,009	1,036	2,246
Vizagapatam	149	166	383
Godavari, Upper	216	555	380
Do. Lower	985	1,459	1,195
Guntur	5,991	3,565	5,567
Nellore	1,890	1,513	2,227
Total	11,240	8,294	11,998
Second Circle.			
Anantapur	6,283	7,265	7,682
Kurnool, East	1,994	3,923	2,473
Do. South	9,472	6,156	5,972
Do. West	5,435	3,889	6,401
Cuddapah, North	2,664	3,035	2,919
Do. South	2,636	4,082	2,606
Total	28,484	28,350	28,053
Fourth Circle.			
Chittoor	2,427	2,534	2,345
Vellore	4,735	4,978	5,845
Salem, North	1,522	1,188	1,497
Do. Central	1,592	2,101	2,678
Do. South	1,793	773	1,123
Total	12,069	11,574	13,488
Fifth Circle.			
Kollegal	2,004	1,796	2,708
Coimbatore, North	969	3,311	2,152
Do. South	203	81	345
Madura	3,026	2,560	3,850
Tinnevelly	1,187	1,706	1,455
Total	7,389	9,454	10,510
Sixth Circle.			
Mangalore, North	198	221	157
Do. South	165	285	263
Wynaad	137	156	162
Nilambur	31	23	283
The Nilgiris	332	601	675
Palghat	209	124	310
Total	1,072	1,410	1,850
Parlakimedi Maliahs	..	..	..
Grand Total, Presidency	60,254	59,082	65,899

ANNUAL FORM No. 25.

Forest Department, Madras Presidency.

Area of Reserved Forests and Reserved Lands during 1930-31.

ANNUAL

Forest Department,

Area of Reserved Forests and

Districts.	Area of Reserved Forests.					
	Area on 1st April 1930.		Added during the year.	Excluded during the year.	Area on 31st March 1931.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
First Circle.						
Ganjam	400,122	625	..	(c) 79	400,043	625
Vizagapatam	196,547	307	..	..	196,547	307
Upper Godavari ..	531,394	830	..	(d) 181	531,213	830
Lower do. ..	363,450	568	(f) 4,224	(f) 2,225 (g) 22	365,427	571
Guntur	578,786	904	..	..	578,786	904
Nellore	524,945	820	(h) 895	(i) 49,963	475,877	744
Total ..	2,595,244	4,054	5,119	52,470	2,547,893	3,981
Second Circle.						
Anantapur	1,147,056	1,792	(a) 348	(b) 899 (a) 383	1,146,122	1,791
Kurnool, East ..	620,743	970	(d) 4,938 (c) 4	(c) 75	625,610	978
Do. South ..	417,516	653	(e) 49,486	(d) 4,938	462,064	722
Do. West ..	604,021	944	..	..	604,021	944
Cuddapah, North ..	505,888	790	..	(b) 44	505,844	790
Do. South ..	440,978	689	..	..	440,978	689
Total ..	3,736,202	5,838	54,776	6,339	3,784,639	5,914

First Circle—

(a) Leased forests.

(b) Notified under section 26 of the Madras Forest Act.

(c) Disforested in notification No. 289, dated 4th September 1930, page 1355, Part I, *Fort St. George Gazette*, dated 9th September 1930 (60 acres).

Disforested in notification No. 308, dated 6th October 1930, page 1569, Part I, *Fort St. George Gazette*, dated 14th October 1930 (19 acres).

(d) Disforested in notification No. 173, dated 29th May 1930, page 776, Part I, *Fort St. George Gazette*, dated 3rd June 1930 (106 acres).

Disforested in notification No. 78, dated 4th March 1931, pages 374 and 375, Part I, *Fort St. George Gazette*, dated 10th March 1931 (75 acres).

(e) Notified under section 4 of the Madras Forest Act.

(f) Alteration due to correct areas of blocks furnished by the Director, S.C. Survey of India, Bangalore, as surveyed on 2-inch scale.

(g) Disforested.

(h) 26 acres due to the addition of the area of the Railway line in Kullurpad reserve originally omitted.

869 acres due to the adoption of correct area of Balayapalli block, Udayagiri Range, Nellore district (vide G.O. Ms. No. 413, dated 23rd February 1931. Notification No. 115, *Fort St. George Gazette*, dated 3rd March 1931).

(i) 201·67 acres due to adoption of correct area according to Collector's R.Dis. No. 6469/29, dated 12th July 1930.

49·78 acres disforested in notification No. 113, dated 17th March 1930 (Tummalapenta North).

10·00 acres disforested in notification No. 116, dated 14th April 1930 (Kullarpad Reserve).

215·33 acres disforested in notification No. 275, dated 29th November 1930 (Kullarpad Reserve).

49,486·13 acres due to transfer of Kanigiri Range to Kurnool South (vide G.O. No. 1962, Development, dated 11th November 1929, and G.O. Ms. No. 68, dated 10th January 1930).

FORM No. 25.

Madras Presidency.

Reserved Lands during 1930-31.

Area of Reserved Lands.						Total area of Reserved Forests and Reserved Lands in square miles.
Area on 1st April 1930.		Added during the year.	Excluded during the year.	Area on 31st March 1931.		
Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
(8)	(9)	(10)	(11)	(12)	(13)	(14)
..	..	..	..	..	..	625
(*a*) 1,313	2	..	..	(*a*) 1,313	2	309
(*b*) 14				(*b*) 14		
488	1	(*e*) 11,365	..	11,853	19	849
6,965	11	(*f*) 282 (*e*) 18,717	..	25,964	40	611
(*b*) 381	1	..	..	(*b*) 381	1	905
..	..	..	..	..	..	744
9,161	15	30,364	..	39,525	62	4,043
..	..	(*f*) 19,499	..	19,499	30	1,821
..	..	..	..	..	..	978
..	..	..	..	..	..	722
..	..	(*f*) 1,863	..	1,863	3	947
..	..	..	..	..	..	790
..	..	..	..	..	..	689
..	..	21,362	..	21,362	33	5,947

Second Circle—

(*a*) Areas disafforested under section 24 of the Forest Act.

(*b*) Decrease in areas of certain Reserves due to the adoption of resettlement figures.

(*c*) The difference is due to the rectification of errors in the extents as per accounts in force with those shown in Survey of India maps.

(*d*) 4,938 acres of Cumbum Reserved Forest were transferred from Kurnool South Division to Kurnool East Division in G.O. Ms. No. 1962, Development, dated 11th November 1929.

(*e*) Whole of Kanigiri Range of Nellore division was transferred from 1st April 1930 to Kurnool South Division of this circle in G.O. Ms. No. 1962, Development, dated 11th November 1929.

(*f*) Areas declared as "Reserved Lands" by the respective Collectors of Anantapur, Cuddapah and Kurnool under section 26 of the Forest Act and leased out for panchayat management.

Area of Reserved Forests and

District.	Area of Reserved Forests.					
	Area on 1st April 1930.		Added during the year.	Excluded during the year.	Area on 31st March 1931.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fourth Circle.						
Chittoor	503,261	786	..	..	503,261	786
Vellore	714,366	1,116	..	(a) 175	714,191	1,116
Salem, North ..	369,686	578	..	..	369,686	578
Do. Central ..	604,504	945	..	(b) 765	603,739	943
Do. South	263,339	411	(c) 136	(d) 284	263,191	411
Total ..	2,455,156	3,836	136	1,224	2,454,068	3,834
Fifth Circle.						
Kollegal	605,830	947	..	..	(a) 605,830	947
Coimbatore, North ..	558,100	872	..	..	(b) 558,100	872
Do. South ..	250,508	(c) 391	..	..	(d) 250,508	391
Madura	437,579	684	..	(e) 334	(f) 437,245	683
Tinnevelly	267,156	417	..	..	(g) 267,156	417
Tanjore	6,468	10	..	..	(h) 6,468	10
Total ..	2,125,641	3,321	..	334	2,125,307	3,320
Sixth Circle.						
Mangalore, North ..	229,896	359	..	..	229,896	359
Do. South ..	280,558	438	..	..	280,558	438
Wynaad	168,111	263	..	..	168,111	263
Nilambur	68,822	108	..	..	68,822	108
Palghat	167,898	262	..	..	167,898	262
The Nilgiris	309,763	484	..	(a) 20·10⅝	309,743	484
Total ..	1,225,048	1,914	..	20·10⅝	1,225,028	1,914
Parlakimedi Maliahs	..	..	..	..	..	..
Grand Total, Presidency ..	12,137,291	18,963	60,031	60,387	12,136,935	18,963

Fourth Circle—

(a) Area disreserved in Ambur Reserved Forest Notification No. 388, dated 17th December 1930.

(b) Disreserved 551 acres in Mallapuram Reserved Forest under Notification No. 113, dated 10th April 1930, and Notification No. 46, dated 5th February 1931, and 214 acres in Pallipatti Reserved Forest under Notification No. 311, dated 11th October 1930.

(c) 136 acres added to Yedumalai Reserved Forest being the correct area reported in Collector's D. Dis. No. 6437/30, dated 25th November 1930.

(d) 284·31 acres deducted from Sengathupatti Extension Reserved Forest due to the correct area furnished by the Director of Survey, Madras.

Fifth Circle—

(a) Includes 6,522 acres of Pachaipalimalai reserve in Mettur taluk of Salem district.

(b) Do. 20,644 acres of Palamalai and additions in Mettur taluk of Salem district and 25,702 acres of ryots' forests.

(c) Do. 27 square miles of Tekadi leased forests.

(d) Do. 3,470 acres of ryots' forests.

(e) Disreservation.

(f) Includes 23,739 acres of ryots' forests.

(g) Do. 6,578 do.

(h) Do. 2,823 do.

(i) Area notified under rule 5, section 26 of the Forest Act.

Reserved Lands during 1930–31—*cont.*

Area of Reserved Lands.						Total area of reserved forests and reserved lands in square miles.
Area on 1st April 1930.		Added during the year.	Excluded during the year.	Area on 31st March 1931.		
Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
(8)	(9)	(10)	(11)	(12)	(13)	(14)
..	..	..	..	..	..	786
70	0·01	..	..	70	0·01	1,116
..	..	..	..	..	..	578
3,790	6	..	..	3,790	6	949
19,302	30	..	..	19,302	30	441
23,162	36	..	..	23,162	36	3,870
..	..	..	..	..	..	947
..	..	..	..	..	..	872
..	..	..	..	..	..	391
..	..	..	..	..	..	683
..	..	7	..	7	·01	417
(*i*) 5,992	9	..	..	5,992	9	19
5,992	9	7	..	5,992	9	3,329
..	..	..	..	..	..	359
5,960	9	..	..	5,960	9	447
22	..	..	..	22	..	263
11,510	18	..	..	11,510	18	126
..	..	..	..	..	..	262
1,210	2	..	..	1,210	2	491
* 2,865	*5	..	..	* 2,865	*5	
21,567	34	..	..	21,567	34	1,948
112,895	176	..	..	112,895	176	176
172,777	270	51,733	..	224,510	350	19,313

Sixth Circle—

* Todapatta lands.

(*a*) Disforested under section 24 of the Act.

Appendix to Form No. 25.

Statement showing the areas according to the final reclassification for the year 1930–31.

Name of forest division.	Class I or departmental forests.	Class III or ryots' forests.	Total.
	Sq. mls.	Sq. mls.	Sq. mls.
First Circle.			
Ganjam	625	..	625
Vizagapatam	274	33	307
Godavari Upper	830	..	830
Do. Lower	491	80	571
Guntur	612	292	904
Nellore	372	372	744
Total	3,204	777	3,981
Second Circle.			
Anantapur	(a) 576	1,215	1,791
Kurnool, East	945	33	978
Do. South	665	57	722
Do. West	854	90	944
Cuddapah, North	758	32	790
Do. South	671	18	689
Total	4,469	1,445	5,914
Fourth Circle.			
Chittoor	578	208	786
Nellore	706	410	1,116
Salem, North	567	11	578
Do. Central	713	230	943
Do South	256	155	411
Total	2,820	1,014	3,834
Fifth Circle.			
Kollegal	947	..	947
Coimbatore, North	832	40	872
Do. South	(b) 386	5	391
Madura	647	37	683
		(c)—334 acres.	..
Tinnevelly	407	10	417
Tanjore	6	4	10
Total	3,225	95	3,320
Sixth Circle.			
Mangalore, North	359	..	359
Do. South	438	..	438
Wynaad	263	..	263
Nilambur	108	..	108
Palghat	252	10	262
The Nilgiris	484	..	484
Total	1,904	10	1,914
Grand Total, Presidency	15,622	3,341	18,963

Note.—(a) Includes 5·46 square miles of Adoni, East, and addition and Adoni, West, Block B and addition leased to Adoni municipality.

(b) Includes 27 square miles of Tekkadi Leased Forests.

(c) Disreservation.

ANNUAL FORM No. 26.

Forest Department, Madras Presidency.

Progress made in Forest Settlements during the year 1930-31.

Annual Form No. 26.

Forest Department, Madras Presidency.

Progress made in Forest Settlements during the year 1930-31.

Name of forest division.	Name of forest.	Area in square miles.			Cost during the year.		Entire cost per square mile of the area finally settled.	Government notification, of settlement.	
		Finally settled during the year.	In hand at the commencement of the year.	Taken in hand during the year.	In forest accounts.	In other accounts.		Number.	Date.
	First Circle.								
Godavari Upper.	Repaka Extension	..	0·76	..	..	..	..	..	....
	Maddigudem block	..	..	5·03	..	..	..	..	....
	Palamadugu block	..	..	2·09	..	..	..	..	....
	Mattapalli Extension Block	..	..	0·37	..	..	..	..	....
	Walsugri Extension Block	..	..	0·54	..	..	..	..	....
	Venkatapuram Block	..	..	9·23	..	..	..	..	....
	Pedamidesileru Extension Block	..	..	0·47	..	..	..	..	....
Godavari Lower	Bolagonda	..	6·49	..	..	..	..	..	....
	Banadapalli	..	4·82	..	..	..	..	..	....
	Vedulla Konda	..	..	1·03	..	..	..	..	....
	Addathigala	..	..	3·14	..	..	..	..	....
	Duchseti	..	..	9·58	..	..	..	..	....
	Velamalakota	..	..	2·80	..	..	..	..	....
	Musurumille	..	..	4·08	..	..	..	..	....
	Sittapalli	..	..	2·34	..	..	..	..	....
	Italapadu	..	..	0·90	..	..	..	..	....
	Kannaram	..	..	1·53	..	..	..	..	....
	Lakshimpuram	..	..	3·81	..	..	..	..	....
	Total ..	..	12·07	46·94	..	..	..	..	
	Second Circle.								
Anantapur ..	....	..	..	..	Nil.	..	..	..	....
Kurnool East ..	....	..	..	..	Nil.	..	..	..	....
Do. South ..	....	..	..	.	Nil.	..	..	..	....
Do. West ..	....	..	..	..	Nil.	..	..	..	....
Cuddapah North.	....	..	..	..	Nil.	..	..	..	....
Do. South.	....	..	..	..	Nil.	..	..	..	....
	Total ..	..	..	..	..	..	..	..	

					Rs. A. P.				
	Fourth Circle.								
Chittoor ..	Nil.	Nil.	Nil.	Nil.	..	..	..	..	..
Vellore	Karuthamalai	..	0·025	..	51 10 0	..	..	255	15th July 1929.
	Do.	..	..	0·016	31 0 0	..	..	315	15th October 1930.
Salem North ..	Nil.	Nil.	Nil.	Nil.	..	..	..	..	..
Do. Central ..	Arana and Thirtagiri Blocks	..	5·92*	..	..	..	..	363	7th July 1909.
Do. South ..	Adukkam Puducombai	..	7·00†	..	..	..	..	142	13th May 1925.
	Perumalmalai	..	7·00†	..	..	..	..	162	4th June 1925.
	Bailnad	..	16·00†	..	..	..	..	99	8th March 1926.
	Total ..	..	35·945	0·016	82 10 0	..	..		
	Fifth Circle.								
Tinnevelly ..	Kuttalam No. III Extension No. 4	..	..	0·01	..	..	..	2042 M.S. Dev.	7th November 1930.
	Sixth Circle.								
	(1) Kinnanur	..	1·43	..	..	..	..	354	13th October 1926.
			1·21	..	..	..	..	354	Do.
South Mangalore.	(2) Eleri	..	4·40	..	64 15 0	..	..	269	6th August 1929.
	(3) Panathady	..	0·92	..	..	..	..	270	Do.
	(4) Aletti East Extension	..	1·35	..	39 8 0	..	..	271	Do.
	(5) Painkere	..							
	Total ..	..	9·31	..	104 7 0	..	..		
	Grand Total, Presidency ..	..	57·32	46·966	187 1 0	..	..		

* It has been decided by the Chief Conservator to issue section 4 notification afresh as the entire settlement records are not forthcoming. The survey of these blocks by the Survey of India Party is now in progress.

† The survey of these three blocks by the Madras Survey Party is in the final stage. These blocks will be taken up for settlement as soon as the final survey records are received from the Survey Department

Note.—There are no Forest Settlements during the year in the Second Circle.

ANNUAL FORM No. 27.

Forest Department, Madras Presidency.

Record of demarcation and maintenance of boundaries, 1930-31.

District.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries still to be demarcated at the close of the year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year.	
								On new work.	On repairs.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
First Circle.	M. F. CH.	M. F. CH.	MILES.	M. F. CH.	MILES.	MILES.	M. F. CH.	RS.	RS.
Ganjam	40 1 1	(*a*) (*e*)1,360 4 7	..	1,400 5 8	..	80	1,480 5 8	1,021	..
Vizagapatam ..	..	(*a*) 459 0 0	..	459 0 0	..	19	478 0 0	..	..
Godavari, Upper.	3 0 0	(*a*) 610 0 0	..	613 0 0	..	151	764 0 0	(*b*) 832	491
Do. Lower.	126 0 0	(*a*)1,093 0 0	..	1,219 0 0	..	81	1,300 0 0	3,043	1,014
Guntur	..	(*a*) 878 0 0	..	878 0 0	..	201	1,079 0. 0	..	274
Nellore	..	(*a*) 414 0 0 (*c*)	..	414 0 0	..	124 (*c*)	538 0 0	(*d*)205	..
Total ..	169 1 1	4,814 4 7	..	4,983 5 8	..	656	5,639 5 8	5,101	1,779
Second Circle.									
Anantapur ..	..	(*a*) 666 0 0	34	700 0 0	..	142	842 0 0	..	..
Kurnool, East ..	..	(*b*) 615 0 0	..	615 0 0	..	48	663 0 0	..	167
Transferred from Kurnool South division.	..	2 0 0	..	2 0 0	3	..	5 0 0	..	
Kurnool South ..	..	(*b*) 545 0 0	55	600 0 0	..	5	605 0 0	..	84
Do. West ..	..	(*b*) 994 0 0	57	1,051 0 0	..	100	1,151 0 0	..	179
Cuddapah, North	..	(*b*) 499 0 0	265	764 0 0	..	13	777 0 0	..	29
Do. South.	..	(*a*) 343 0 0	17	360 0 0	..	62	422 0 0	..	20
Total ..	..	3,664 0 0	428	4,092 0 0	3	370	4,465 0 0	..	479
Fourth Circle.	M. F. CH.	M. F. CH.	MILES	M F. CH.	MILES.	M.F.CH	M. F. CH.	RS. A.	RS. A.
Chittoor ..	..	690 0 0	104	(*a*)794 0 0	..	36 0 0	830 0 0	..	101 14½
Vellore	1 7 4	1,670 0 0	..	1,671 7 4	..	39 0 0	1,710 7 4	..	137 0
Salem, North ..	6 4 0	780 5 0	..	787 1 0	..	70 4 0	857 5 0	123 14	130 3
Do. Central ..	..	1,059 7 4	..	1,059 7 4 (*b*)	..	17 6 4	1,077 5 8	233 8	881 5
Do. South ..	2 0 0	590 0 0	..	592 0 0	..	..	592 0 0	..	..
Total ..	10 3 4	4,790 4 4	104	4,904 7 8	..	163 2 4	5,068 2 2	357 6	1,250 6½

Note for First Circle.
- (*a*) Cleared by subordinates free of cost.
- (*b*) Of this Rs. 798 represents cost of preliminary demarcation and survey and reclearance of boundaries of blocks proposed for reservation and the balance represents cost of demarcation of portions of Pedamidisileru and Nugur R.Fs. disreserved.
- (*c*) Difference between the closing balance of last year and this figure represents extent of boundaries of Kanigiri range transferred to Kurnool South.
- (*d*) Represents cost of widening 7 miles and 6 furlongs of existing boundaries and erecting stone pillars in Sathiavedu and Nagalapuram R.Fs.
- (*e*) Revised figure adopted after actual measurement of the lines.

Note for Second Circle.
- (*a*) Maintained by subordinates free of cost.
- (*b*) Partly maintained by subordinates and partly on payment.

Note for Fourth Circle.
- (*a*) The difference of one mile is due to rounding off.
- (*b*) The decrease of 2 miles and 7 furlongs is due to disreservation in Central Salem division.

Record of demarcation and maintenance of boundaries, 1930-31—*cont.*

District.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries still to be demarcated at the close of the year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year.	
								On new work.	On repairs.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Fifth Circle.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	RS.	RS.
Kollegal	12	376	..	388	55	152	595	317	..
Coimbatore, North.	17	556	..	573	86	106	765	562	..
Do. South.	..	178	42	220	..	72	292	..	(*b*)219
Madura	17	887	359	1,263	177	171	1,611	1,670	..
Tinnevelly ..	..	295	137	432	..	35	467	..	3
Total ..	46	(*a*) 2,292	538	2,876	318	536	3,730	2,549	222
Sixth Circle.									
Mangalore, North.	..	(*c*) 40	(*d*) 1,186	1,226	..	103	1,329	..	(*c*)254
Do. South.	..	(*c*) 29	(*d*) 1,106	1,135	..	101	1,236	..	..
Wynaad	(*a*) 8	(*b*) 54	1,142	1,204	..	36	1,240	487	437
Nilambur	..	(*e*) 101	..	101	14	55	170	..	..
The Nilgiris ..	(*f*) 1	(*g*) 433	1,111	1,545	..	315	1,860	90	1,765
Palghat	..	(*h*) 125	155	280	..	39	(*i*) 319	..	(*j*)137
Total ..	9	782	4,700	5,491	14	649	6,154	577	2,593
Parlakimedi Maliahs.	..	504	..	504	..	24	529	..	..
Grand Total, Presidency.	234	16,847	5,770	22,851	335	2,398	25,586	8,584	6,323

Note for Fifth Circle.

(*a*) Includes 2,275 miles cleared by subordinates free of cost.
(*b*) Excludes Rs. 40 spent by the Mount Stuart Commercial concern for clearing 10 miles of internal boundaries.

Note for Sixth Circle.

(*a*) Demarcation of the reserve boundaries where the previous demarcation marks were not clear.
(*b*) Includes 27 miles cleared under 'Political', and 5 miles cleared free of cost by subordinates.
(*c*) Pertains to the clearing of lines under 'Political', Mysore-South Kanara boundary.
(*d*) Usual line clearing by subordinates free of cost.
(*e*) Clearing done in connexion with fire protection work.
(*f*) Increase of one mile is due to revision of boundaries necessitated by disforestation.
(*g*) Includes 192 miles cleared by subordinates free of cost.
(*h*) Clearing done at the time of fire protection work and by subordinates.
(*i*) Excludes the boundary line of ryots' forests under panchayat management.
(*j*) Expenditure on rectification of Thadagam Reserved Forest boundary.

Annual Form No. 28.

Forest Department, Madras Presidency.

Progress made in Working Plans during 1930–31.

District.	Areas for which Working Plans have been completed and approved by the Chief Conservator of Forests.		Areas for which Working Plans are being compiled or have been compiled but not sanctioned.		Areas for which Working Plans have still to be taken in hand.	Total forest area as per form 25.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
First Circle.	sq. mls.	sq. mls.	sq. mls.	sq. mls.	sq. mls.	sq. mls.
Reserved Forests.						
Ganjam	625	..	..	..		625
Vizagapatam	219	..	..	..	88	307
Upper Godavari ..	..	..	..	..	830	830
Lower do. ..	393	..	..	..	178	571
Guntur	35	..	336	204	329	904
Nellore	80	..	39	..	625	744
Total ..	1,352	..	375	204	2,050	3,981
Reserved Lands.						
Vizagapatam ..	..	..	..	..	2	..
Upper Godavari ..	..	..	..	..	19	..
Lower do. ..	..	..	..	..	40	..
Guntur	..	..	..	..	1	..
Total ..	..	..	..	..	62	..
Second Circle.						
Anantapur ..	(*a*) 576	..	..	..	(*l*) 1,215	1,791
Kurnool, East ..	886	(*b*) 8	..	..	(*c*)51+(*l*)33	978
Do. South ..	351	(*d*) 262	(*e*) 9	..	(*f*)43+(*l*)57	722
Do. West ..	..	..	(*g*) 854	..	(*l*) 90	944
Cuddapah, North ..	752	..	..	..	(*h*) 6+(*l*)32	790
Do. South ..	113	..	(*i*) 558	..	(*l*) 18	689
Total ..	2,678	270	1,421	..	1,545	5,914

Note for Second Circle.

(*a*) Decrease due to disafforestation of 0·59 square mile in Moka plantation; exclusion of 0·85 square mile due to adoption of resettlement areas in Bellary district, transfer of 2·45 square miles of Adoni West Block A Reserved Forest to panchayat. This area includes also 5·46 square miles of Adoni East and West blocks leased to Adoni Municipality.

(*b*) This is the area of a portion of the Cumbum Reserved Forest which was transferred from Kurnool South to Kurnool East division with effect from 1st April 1930. This area was included in the Working Plan sanctioned for Kurnool East division already by the Chief Conservator of Forests in his Proceedings No. 230, Press, dated 4th July 1929, hence shown in column 3 of the statement.

(*c*) This 51 square miles comprise of the areas of 8 E.N. Blocks aggregating to 38 square miles retransferred from Class III to Class I during the year in B.P. Ms. No. 1783, dated 18th June 1930, and 13 square miles of E.N. Block V shown in last year's return.

(*d*) Working Plan for the Giddalore-Gundlakamma ranges sanctioned in Chief Conservator's Proceedings No. 306, Press, dated 4th June 1930.

(*e*) A tentative working scheme for 9 square miles in Nandyal Terai Block I (Gazulapalle) sanctioned by the Conservator is in force. This was by mistake included in column 5 last year.

(*f*) The whole of Kanigiri Range of Nellore division (i.e.), 39 square miles was transferred to Kurnool South division during the year and 4 square miles of Nandyal Terai Block II (Ernipad) which was wrongly included last year under column 5 is now excluded and shown in column 6 as no Working Plan is sanctioned for this area.

(*g*) Working Plans for whole of Nallamalais and Yerramalais are pending sanction with the Chief Conservator of Forests.

(*h*) The area of Chennupalle Reserved Forest retained under Class I as no panchayat is yet formed for it.

(*i*) Working Plan for this area is under preparation.

(*l*) Area of forest Reserves under panchayat management.

Progress made in Working Plans during 1930-31—*cont.*

District.	Areas for which Working Plans have been completed and approved by the Chief Conservator of Forests.		Areas for which Working Plans are being compiled or have been compiled but not sanctioned.		Areas for which Working Plans have still to be taken in hand.	Total forest area as per form 25.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SECOND CIRCLE—*cont.*	SQ. MLS.		SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Unclassed forests.						
Anantapur	(*f*) 1	..	..	..	..	..
Total ..	1	..	..	..	..	..
FOURTH CIRCLE.						
Chittoor	577 (*a*) 1	..	..	..	(*b*) 208	786
Vellore	541 (*a*) 189	..	165	..	(*b*) 221	1,116
Salem, North ..	141 (*a*) 5	..	217	..	210 (*b*) 5	578
Do. Central ..	512 (*a*) 111	..	110 [(*c*) 508]	..	92 (*b*) 119	943
Do. South	211 (*a*) 38	..	44 [(*c*) 286]	..	(*b*) 118	411
Total ..	1,982 (*a*) 344	..	536	..	302 (*b*) 671	3,834
FIFTH CIRCLE.						
Kollegal	(*a*) 947	..	..	..	..	947
Coimbatore, North	50 (*a*) 267 (*c*) 212	..	..	..	(*d*) 40 303	872
Do. South ..	85 (*a*) 2	..	..	30	269 (*d*) 5	391
Madura	368	..	17	..	261 (*d*) 37	683
Tinnevelly	(*a*) 287 (*b*) 17	..	..	..	103 (*d*) 10	417
Tanjore	10	..	..	..	..	10
Total ..	2,245	..	17	30	1,028	3,320

Note for Second Circle.

(*f*) This is the area of Garega unreserves (i.e.,) 0·54 square mile included in the sanctioned Working Plan of the division in Chief Conservator's Proceedings No. 42, Press, dated 28th January 1930, hence it is now shown separately under "unclassed forests" as no sections 4 and 16 have been published for this area nor has the Collector notified this area under "Reserved Lands" under the power vested in him as per section 26 of the Madras Forest Act.

Note for Fourth Circle.

(*a*) Ryots' forests.

(*b*) Ryots' forests—No Working Plans required.

(*c*) Areas of the consolidated Working Plans for Central and South Salem divisions as finally to be constituted.

508 square miles in column (4) includes 409 square miles out of 512 in column (2) and 71 square miles out of 110 in column (4) and 28 square miles for which there was no Working Plan before but *excludes* 63 square miles covered by the West Vellore Working Plan sanctioned in Chief Conservator's No 316, Press, dated 10th November 1924, and 40 square miles of old Working Plans proposed to be transferred to other divisions shown in column (2).

286 square miles in column (4) includes figures 211 and 44 in columns (2) and (4) and besides 30 square miles of Reserved Lands.

Note for Fifth Circle.

(*a*) Area of temporary scheme sanctioned by Conservator.

(*b*) Area of lapsed scheme sanctioned by Chief Conservator under revision.

(*c*) Area of lapsed Working Plan for extraction of dead sandalwood trees.

(*d*) Area of ryots' forests.

Progress made in Working Plans during 1930-31—*cont.*

District.	Areas for which Working Plans have been completed and approved by the Chief Conservator of Forests.		Areas for which Working Plans are being compiled or have been compiled but not sanctioned.		Areas for which Working Plans have still to be taken in hand.	Total forest area as per form 25.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
FIFTH CIRCLE—*cont.*	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Reserved Land—Nil.						
Unreserved Land—Nil.						
SIXTH CIRCLE.						
Reserved Forests.						
Mangalore, North ..	(*a*) 38	..	..	..	(*g*) 321	359
Do. South ..	(*b*) 7	..	(*c*) 431	..	..	438
Wynaad	158	..	105	..	..	263
Nilambur	108	..	..	..	..	108
The Nilgiris	159	..	..	..	325	484
Palghat	(*d*) 62	..	48	142	(*e*) 10	262
Total ..	532	..	584	142	656	1,914
Reserved Lands.						
Mangalore, South ..	..	..	..	..	9	..
The Nilgiris	..	..	..	..	(*f*) 7	..
Total ..	..	..	..	..	16	..
Leased Forests.						
Nilambur	18	..	..	..	..	..
Grand total ..	550	..	584	142	672	..
Grand total, Presidency—						
Reserved Forests.	9,132	270	2,933	376	6,252	18,963
Reserved Lands..	..	..	..	..	78	78
Unclassed Forests.	1	..	..	..	..	1
Leased Forests ..	18	..	..	..	..	18
Total ..	9,151	270	2,933	376	6,330	19,060

Note for Sixth Circle.

(*a*) Working scheme sanctioned for catechu area and for fuel areas.

(*b*) This is covered by one Working Plan sanctioned by the Board of Revenue, two schemes sanctioned by Chief Conservator of Forests and one sanctioned by Conservator.

(*c*) A regular Working Plan for the whole division is under preparation by the Working Plans Circle. The area shown in column (2) is also to be included in it.

(*d*) Revised figure adopted.

(*e*) Represents area under panchayat management and portions of Bolampatti Blocks I and II.

(*f*) Toda patta lands and Badaga plantations scattered over the district

(*g*) Working Plans are under preparation by the Working Plans Branch.

ANNUAL FORM No. 29.

Forest Department, Madras Presidency.

Communications and Buildings during 1930-31.

ANNUAL FORM No. 29.

Communications and Buildings during 1930-31.

Description.	Name of division.	At the commencement of the year.			Additions and exclusions during the year.			At the close of the year.			Repairs during the year.		
		Number.	Length.	Capital cost.	Number.	Length.	Capital cost.	Number.	Length.	Capital cost.	Number.	Length.	Capital cost.
	First Circle.		M. F. CH.	RS.		M. F. CH.	RS.		M. F. CH.	RS.		M. F. CH.	RS.
Roads and bridges including culverts.	Ganjam	24	97 5 6 (a)	63,169	1	4 6 0	3,996	25	102 3 6	67,165	16	47 5 0	3,018
	Vizagapatam ..	(a) 21	59 1 0	(a) 14,675	1	3 1 0	1,245	22	62 2 0	15,920	11	20 0 0	766
	Godavari Upper.	19	171 3 3	30,494	2	2 0 1	1,107	21	173 3 4	31,601	12	54 3 5	677
	Do. Lower.	21	113 6 8	(b) 41,843	1	0 3 1	4,826	20	109 3 8	43,082	3	15 6 0	1,537
	Guntur	33	185 0 0	32,184	(c) — 2	— 9 6 1	— 3,587	33	185 0 0	32,184	14	32 2 0	1,895
	Nellore	28	174 6 0	13,985	..	..	— 931	26	152 6 0	13,154	9	20 0 0	1,297
					(d) — 2	— 22 0 0	(e) + 100						
	Total ..	146	801 6 7	1,96,350	1	— 21 3 9	6,756	147	785 2 8	2,03,106	65	190 0 25	9,190
Buildings, residential and non-residential.	Ganjam	118	..	88,827	+ 1	..	1,230						
					— 2		(h) + 410	117	..	89,932	77	..	14,074
							— 125						
	Vizagapatam ..	41	..	10,871	1	..	486	42	..	11,357	23	..	1,329
	Godavari Upper.	(f) 79	..	73,509	1	..	1,634	80	..	75,145	59	..	2,680
	Do. Lower.	(f) 101	..	74,790	2	..	3,267	101	..	77,910	52	..	1,854
					— 2		— 147						
	Guntur	49	..	42,699	1	..	185	50	..	42,884	16	..	881
	Nellore	36	..	51,718	+ 1	..	+ 219	32	..	46,149	23	..	2,521
					(d) — 5		— 5,789						
	Total ..	424	..	3,42,414	— 2	..	+ 1,370	422	..	3,43,377	250	..	23,339

Other works.	Ganjam ..	25	..	4,753	Nil.	..	..	25	..	4,753	9	..	251
	Vizagapatam ..	9	..	1,838	..	..	212	9	..	2,050	..	..	..
	Godavari Upper.	(f) 19	..	15,929	..	..	(g) 310	19	..	16,239	10	..	139
	,, Lower.	(f) 14	..	4,271	1	..	24	15	..	4,295	..	..	..
	Guntur ..	9	..	1,264	..	..	..	9	..	1,264	2	..	48
	Nellore	18	..	2,792	(d)— 3	..	— 682 (g) + 57	15	..	2,110	14	..	75
	Total ..	94	..	30,847	— 2	..	— 79	92	..	30,711	35	..	513
	Second Circle.												
Roads including bridle-paths and culverts.	Anantapur ..	117	48 2 0	8,189	..	..	..	117	48 2 0	8,189	10	40 4 0	373
	Kurnool, East ..	54	322 7 0	65,053	..	..	..	54	322 7 0	65,053	17	42 1 0	1,729
	,, South ..	23	117 0 0	46,537	+ 3	22 0 0	(a) + 931	26	139 0 0	47,468	14	42 0 0	879
	,, West ..	10	70 7 0	26,888	..	4 1 0	+ 7,078	10	75 0 0	33,966	5	40 0 0	613
	Cuddapah, North	32	139 2 0	23,753	+ 2	5 0 0	+ 1,344	34	144 2 0	25,097	2	32 0 0	629
	,, South.	35	186 7 0	45,156	+ 1	2 3 0	+ 715	36	189 2 0	45,871	11	39 3 0	1,787
	Total ..	271	885 1 0	2,15,576	+ 6	+33 4 0	+ 10,068	277	918 5 0	2,25,644	59	236 0 0	6,010
Buildings, residential and non-residential.	Anantapur ..	29	..	51,011	— 1 ..	..	— 3,068 + 2,206	28	..	50,150	20	..	646
	Kurnool East ..	65	..	68,480	+ 5	..	+ 2,016	70	..	70,497	38	..	735
	Kurnool, South..	60	..	95,037	+ 4 — 6	..	(b) + 6,914 — 1,137	58	..	1,00,767	36	..	1,406
	Do. West ..	92	..	1,30,709	.. — 2	..	+ 117 — 392	90	..	1,30,434	28	..	1,033
	Cuddapah, North.	51	..	78,489	+ 1 ..	..	+ 3,178 ..	52	..	81,667	31	..	980
	Do. South.	85	..	91,342	..	..	+ 1,720	85	..	93,062	49	..	1,322
	Total ..	382	..	5,15,068	+ 1	..	+ 11,554	383	..	5,26,577	262	..	6,122

Note for First Circle.—(*a*) Represents correct length of roads with their capital cost at the beginning of the year.
(*b*) The figure furnished in last year's return did not include expenditure as part construction of Kachalur Pedanuthula road and extension of Budikonda Mallavaram road. It is now rectified.
(*c*) A length of 9 miles 6 furlongs 1 chain of road in Lower Godavari has been transferred to Public Works Department.
(*d*) Represents length and value of roads transferred to Kurnool South along with Kanigiri Range.
(*e*) Represents improvements to existing roads
(*f*) Represents improvements in closing balance and opening balance is due to an error in last year's return.
(*g*) The difference in closing balance and opening balance is due to an error in last year's return.
(*h*) Represents cost of improvements in existing wells.
Improvements to Extra Assistant Conservator's quarters at Balliguda.

Communications and Buildings during 1930-31—*cont.*

Description.	Name of division.	At the commencement of the year.			Additions and exclusions during the year.			At the close of the year.			Repairs during the year.		
		Number.	Length.	Capital cost.	Number.	Length.	Capital cost.	Number.	Length.	Capital cost.	Number.	Length.	Capital cost.
			M. F.	Rs.		M. F.	Rs.		M. F.	Rs.		M. F.	Rs.
Other works such as wells.	*Second Circle*—cont.												
	Anantapur ..	..	..	..	..	..	..	..	..	..			
	Kurnool, East ..	21	..	7,336	+1	..	(*c*) + 55	22	..	7,391	2	..	4
	Do. South ..	11	..	8,657	+2	..	(*a*) +395	13	..	9,052	2	..	20
	Do. West ..	10	..	9,040	..	..	+ 55	10	..	9,095	3	..	44
	Cuddapah, North.	82	..	2,300	+1	..	+ 445	83	..	2,745	1	..	14
	Do. South.	15	..	5,139	..	..	..	15	..	5,139	2	..	21
	Total ..	139	..	32,472	+4	..	+ 950	143	..	33,422	2	..	9
											12	..	112
Buildings.	*Third Circle.*												
	Forest Research	..	..	..	(*a*) 1	..	234	1	..	560	1	..	(*b*) 326
Roads including bridle-paths and culverts.	*Fourth Circle.*												
	Chittoor	42	185 0	41,314	..	..	(*a*) 603	42	185 0	41,917	24	88 6	3,414
	Vellore	35	174 0	1,08,517	..	..	(*a*) 2,579	35	174 0	1,11,096	23	138 4	5,113
	North Salem ..	16	110 1	47,088	(*b*) — 1	(*b*)3 2	(*a*) 4,143	15	106 7	51,186	16	110 1	3,852
	Central Salem ..	13	69 2	16,069	+ 2	4 3	(*b*) — 45	15	73 5	16,534	12	50 6	2,798
	South Salem ..	34	151 0	33,719	..	0 5⅘	465	34	151 5⅘	34,509	14	42 7	2,186
							790						
	Total ..	140	689 3	2,46,707	1	1 6⅘	8,535	141	691 1⅘	2,55,242	89	431 0	17,363

Buildings, residential and non-residential.	Direction ..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Chittoor	81	..	89,541	..	..	(a) + 94	81	..	89,635	34	..	1,697 (f) 819 (d) 251
	Vellore	98	..	1,35,565	..	..	(a) 5,977 (c) — 15	98	..	1,41,527	63	..	2,517 (f) 1,864
	North Salem ..	46	..	78,716	— 4	..	(a) +2,390 (c) —4,090	42	..	77,016	33	..	— 1,360 (f) 240 (d) 45
	Central Salem ..	(e) 92	..	78,118	+ 1	..	11 (g) 3,989 (a) 359	93	..	82,477	43	..	1,883 (f) 998 (d) 80
	South Salem ..	53	..	51,517	+ 1	..	1,706	54	..	53,223	18	..	781 (f) 815
	Total ..	370	..	4,33,457	— 2	..	10,421	368	..	4,43,878	191	..	13,350
Other works, such as wells.	Chittoor	37	..	11,283	..	..	(a) + 294	37	..	11,577	4	..	22
	Vellore	59	..	4,655	+ 3	..	1,088	62	..	5,743	5	..	70
	North Salem ..	18	..	4,417	+ 1	..	306	19	..	4,723	1	..	10
	Central Salem ..	27	..	2,551	..	..	..	27	..	2,551	5	..	19
	South Salem ..	10	..	2,803	..	..	50	10	..	2,853	3	..	94
	Total ..	151	..	25,709	4	..	1,738	155	..	27,447	18	..	215
Roads including bridle-paths.	*Fifth Circle.*												
	Kollegal ..	13	104 7 (a) 4 4	19,921 (a)11,566	2	3 2	1,903	15	112 5	(e) 33,390	7	51 1	7,531
	North Coimbatore	14	112 4	82,240	..	..	..	14	112 4	(e) 82,240	10	74 1	7,813
	South Coimbatore	16	56 2	(b)2,70,052	..	2 4	(d) 6,070	16	58 6	2,76,122	14	51 3	(c) 24,201
	Madura	44	295 0	1,34,790	1	2 0	827	45	297 0	1,35,617	43	318 4	11,216
	Tinnevelly	64	191 4	71,368	..	0 5	1,628	64	192 1	72,996	12	47 1	4,500
	Total ..	151	764 5	5,89,937	3	8 3	10,428	154	773 0	6,00,365	86	542 2	55,261

Note for Second Circle.—
(a) Relates to Kanigiri Range transferred from the I Circle.
(b) Includes Rs. 5,467 relating to Kanigiri range transferred from the I Circle.
(c) Excludes Rs. 486 relating to Chenchu works wrongly debited by the Accountant-General under this head.

Note for Third Circle.—
(a) Three compartments out of a stock shedat Top Slip were transferred to Research division in Chief Conservator's Proceedings L. Dis. No. 7872/30, dated 4th October 1930.
(b) Converted into quarters.

Note for Fourth Circle.—
(a) Improvements and cost of acquisition.
(b) Transferred to other departments.
(c) Written off during the year.
(d) Represents payments of taxes.
(e) Revised figures furnished by District Forest Officer.
(f) Cost of establishment.
(g) Cost of sites of certain buildings since fixed and added on to the capital cost.

Note for Fifth Circle.—
(a) Omitted to be included last year
(b) Extension of roads constructed in previous years.
(c) Includes Rs. 19,532 spent by the Mount Stuart Commercial concern.
(d) Includes Rs. 3,010 spent by the Mount Stuart Commercial concern. Rupees 329 will be recovered from the commercial concern on account of excess advance made towards capital works. Excludes Rs. 6,537 adjusted in 1930-31 accounts but accounted for in 1929-30 return.
(e) In respect of some roads taken over from the Local Fund Department, Capital cost is not known.

Communications and Buildings during 1930-31—*cont.*

Description of work.	Name of division.	At the commencement of the year.			Additions and exclusions during the year.			At the close of the year.			Repairs during the year.		
		Number.	Length.	Capital cost.	Number.	Length.	Capital cost.	Number.	Length.	Capital cost.	Number.	Length.	Capital cost.
	Fifth Circle—cont.		M. F.	RS.		M. F.	RS.		M. F.	RS.		M. F.	RS.
Buildings, residential and non-residential.	Kollegal	57	..	74,550	5	..	8,992	65	..	82,602	21	..	2,286
		+3					—940						
	North Coimbatore..	76	..	76,929	+1	..	+1,785	76	..	78,164	46	..	2,381
					—1	..	—550						
	South Coimbatore..	89	..	1,45,352	—2	..	(*f*) —1,589	91	..	1,46,972	27	..	(*g*) 2,710
					+4	..	+3,209						
	Madura	105	..	1,50,088	6	..	—2,008	111	..	1,49,920	69	..	2,365
						..	+1,840						
	Tinnevelly ..	62	..	99,460	..	..	..	62	..	99,460	54	..	3,598
													120
	Total	392	..	5,46,379	13	..	10,739	405	..	5,57,118	217	..	(*i*) 13,460
Other works, such as wells, etc.	Kollegal	18	..	11,635	..	..	15	18	..	11,650	3	..	44
	North Coimbatore..	18	..	3,983	1	..	437	19	..	4,420	4	..	66
	South Coimbatore..	8	..	3,100	1	..	(*h*) 534	9	..	3,634	5	..	(*j*) 1,433
	Madura	34	..	7,022	1	..	489	35	..	7,511	9	..	78
	Tinnevelly ..	14	..	1,770	..	..	..	14	..	1,770	7	..	123
	Total ..	92	..	27,510	3	..	1,475	95	..	28,985	28	..	1,744
	Sixth Circle.												
Roads including bridle-paths and culverts.	Mangalore, North..	36	74 6	15,449	..	..	..	36	74 6	15,449	7	44 4	920
	Do. South ..	34	105 0	26,926	+2	2 5	1,799	36	107 5	28,725	25	85 5	1,146
	Wynaad	59	210 3	77,041	..	(*a*) 8 1	(*b*) 5,282	59	218 4	82,323	54	206 1	12,058
	Nilambur	21	36 2	17,911	+1	1 6	3,169	22	38 0	21,080	16	21 6	1,952
	Do.	2	3 0	48,511	1	..	(*c*) 35,724	3	..	84,235	..	..	..
	The Nilgiris ..	69	113 1	37,747	..	..	..	69	113 1	37,747	69	113 1	2,388
	Palghat	48	235 5	1,63,028	(*c*) +3	(*c*)10 4	(*d*) 4,815	51	256 1	1,67,843	50	245 1	3,238
	Total ..	269	778 1	3,86,613	+7	33 0	50,789	276	808 1	4,37,402	221	716 2	21,702

Buildings, residential and non-residential.	Mangalore, North	74	..	79,644	+3	..	1,019	77	..	80,663	65	..	1,123
	Do. South	41	..	71,704	+14 (f) — 5	..	6,004 (f) — 937	50	..	76,771	42	..	1,081
	Wynaad	116	..	1,28,651	(g) +6 (h) —3	..	(g) 10,675 (h) 3,043	119	..	1,36,283	97	..	2,417
	Nilambur	44	..	1,10,544	+8	..	11,441	52	..	1,21,985	36	..	3,168
	The Nilgiris	99	..	1,48,854	(h) —3	..	(h) —1,807	96	..	1,47,047	51	..	3,249
	Palghat	51	..	1,38,987 (k) +10	(i) +8 (j) — 1	..	(i) 10,380 (j) — 2,900	58	..	1,46,477	56	..	3,046
	Do. (Chenat Nair)	18	..	42,510 (l) + 400	(i) — 7 (l) — 1	..	(i) — 9,971 (h)— 2,112	10	..	30,827	..	..	..
	Total	443	..	1,21,304	+19	..	18,749	462	..	7,40,053	347	..	14,084
Other works, such as wells, etc.	Mangalore, North	29	..	8,906	2	..	983	31	..	9,889	5	..	62
	Do. South	16	..	5,138	..	..	352	16	..	5,490	7	..	26
	Wynaad	20	..	7,414	2	..	1,069	22	..	8,483	17	..	209
	Nilambur	8	..	2,672	..	..	(k) 786	8	..	3,458	5	..	43
	The Nilgiris	1	..	3,919	..	..	..	1	..	3,919	1	..	25
	Palghat	9	..	2,451	(n) 2	..	(n) 1,639	11	..	4,590	3	..	232
	Do. (Chenat Nair)	4	..	10,787	(m) —1	..	(m) —1,048	3	..	(o)9,739	..	..	..
	Total	87	..	41,287	5	..	4,281	92	..	45,568	38	..	597

Note for Fifth Circle—cont.

(*f*) Includes Rs. 345 value of materials obtained from Kombu sub-line demolished.

(*g*) Excludes Rs. 468 spent by the Mount Stuart Commercial concern in 1929–30 but adjusted in 1930–31. This has been accounted for in 1929–30 return. Includes Rs. 142 spent by the commercial concern. Excludes Rs. 130 excess advanced to the concern that will be recovered.

(*h*) Incurred by Mount Stuart Commercial concern.

(*i*) Includes Rs. 1,408 being pay of bungalow watcher.

(*j*) Includes Rs. 814 spent by the Mount Stuart Commercial concern in 1929–30 but adjusted in 1930–31 account towards cost of telephone line. Rupees 240 excess advanced will be recovered from the concern.

Note for Sixth Circle.

(*a*) Existing bridle-paths extended.

(*b*) Represents cost of improvements to existing roads.

(*c*) Transferred during the year from the Forest Engineering Division.

(*d*) Includes Rs. 2,286 representing value of the roads (*c*), adjusted in 1931–32.

(*e*) Roads and bridges in Nilambur Division under construction by Forest Engineer, half of which is debited to "Exploitation", the other half to "General Forest Administration."

(*f*) Relates to 3 buildings—valued Rs. 687 written off and 2 sheds—valued Rs. 250 dismantled.

(*g*) Includes 2 buildings of Nanjangode depot—Value Rs. 2,954 transferred from the Forest Utilization Division and 1 building of Saw Mill at Chedleth—value Rs 2,161 transferred from the Engineering Division.

(*h*) Written off.

(*i*) Seven buildings—valued Rs. 9,971 adjusted in 1931–32 were transferred from the Forest Engineering Division to Palghat Division.

(*j*) Rest house at Agali, transferred to the Revenue Department.

(*k*) Difference in the last year's statement, now added.

(*l*) Value of Dhoni motor shed and depot shed which had no book value.

(*m*) Value of one pipe line and crockery—value Rs. 1,048 transferred to Palghat division

(*n*) Includes a pipe-line and crockery—value Rs. 1,048 adjusted in 1931–32—transferred from the Forest Engineering Division.

(*o*) Includes telephone lines valued at Rs. 1,227—Dismantled.

Communications and Buildings during 1930-31—*cont.*

Description of work.	Name of division.	At the commencement of the year.			Additions and exclusions during the year.			At the close of the year.			Repairs during the year.		
		Number.	Length.	Capital cost.	Number.	Length.	Capital cost.	Number.	Length.	Capital cost.	Number.	Length.	Capital cost.
				Rs.		M. F. CH.	Rs.		M. F. CH.	Rs.		M. F. CH.	Rs.
Roads including bridle-paths and culverts.	Parlakimedi Maliahs.												
Buildings, residential and non-residential.		38	..	5,369	1	..	85	39	..	5,454	32	..	267
Other works such as wells.		2	..	460	..	..	99*	2	..	559	..	..	..
Grand Total, Presidency.	Roads including bridle-paths and culverts.	977	8,919-0	16,35,183	18	55 3 0	86,576	995	3,976 2 0	*18,05,994	520	2,115 4 0	1,09,526
	Buildings, residential and non-residential.	2,049	..	25,63,991	31	..	53,152	2,080	..	26,17,017	1240	..	70,948 100
	Other works.	565	..	1,66,285	14	..	8,434	579	..	1,66,692	131	..	3,181

* The incomplete well work on the Devagiri top was completed during the year at a cost of Rs. 99.

ANNUAL FORM No. 30.

Forest Department, Madras Presidency.

Return of Breaches of Forest Rules during the year 1930-31.

Annual Form No. 30.

Forest Department, Madras.

Return of Breaches of Forest Rules during 1930-31.

District.		Cases pending from 1929-30.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases	Persons.	Cases.	Persons.	Cases.	Persons.	
First Circle.															
By Forest Officers.															
Ganjam	A ..	8	..	43	4	2	49	57	41	165	7	56	48	221	9
	B ..	66	..	345	44	17	406	472	406	1,370	42	156	448	1,526	24
	C ..	..	109	29	..	..	138	..	..	..	..	..	..	..	..
	Total ..	74	109	417	48	19	593	529	447	1,535	49	212	496	1,747	33
Vizagapatam.	A ..	7	..	7	..	2	9	16	4	6	7	23	11	29	5
	B ..	49	..	221	9	4	234	283	211	524	6	49	217	573	66
	C ..	..	..	6	..	..	6	..	..	..	..	..	..	..	..
	Total ..	56	..	234	9	6	249	299	215	530	13	72	228	602	71
Upper Godavari.	A ..	6	..	16	3	6	25	31	22	59	2	2	24	61	7
	B ..	7	..	72	9	14	95	102	93	202	..	..	93	202	9
	C ..	..	67	3	1	1	72	..	..	..	..	..	..	..	..
	Total ..	13	67	91	13	21	192	133	115	261	2	2	117	263	16
Lower Godavari.	A ..	43	..	61	11	5	77	120	66	148	1	1	67	149	53
	B ..	60	..	179	82	25	286	346	255	530	15	67	270	597	76
	C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ..	103	..	240	93	30	363	466	321	678	16	68	337	746	129

Guntur ..	A ..	138	..	392	155	7	554	692	96	230	278	693	374	923	318
	B ..	108	..	318	107	6	431	539	469	1,108	..	..	469	1,108	70
	C ..	..	..	13	..	..	13	..	..	..	..	..	..	..	..
	Total ..	246	..	723	262	13	998	1,231	565	1,338	278	693	843	2,031	388
Nellore ..	A ..	47	..	109	85	4	198	245	50	178	160	402	210	580	35
	B ..	22	..	66	90	2	158	180	174	341	..	..	174	341	6
	C ..	..	..	3	4	..	7	..	..	..	..	..	..	..	..
	Total ..	69	..	178	179	6	363	425	224	519	160	402	384	921	41
Total First Circle by Forest Officers.	A ..	249	..	628	258	26	912	1,161	279	786	455	1,177	734	1,963	427
	B ..	312	..	1,201	341	68	1,610	1,922	1,608	4,075	63	272	1,671	4,347	251
	C ..	..	176	54	5	1	236	..	..	..	..	..	..	..	..
	Total ..	561	176	1,883	604	95	2,758	3,083	1,887	4,861	518	1,449	2,405	6,310	678
							By Revenue Officers.								
Ganjam ..	A ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	B ..	3	..	13	..	1	14	17	13	16	1	1	14	17	3
	C ..	..	..	2	..	..	2	..	..	..	..	..	..	..	..
	Total ..	3	..	15	..	1	16	17	13	16	1	1	14	17	3
Vizagapatam.	A ..	2	..	7	4	1	12	14	11	17	3	12	14	29	..
	B ..	10	4	91	.. 12	2	109	119	109	180	..	..	109	180	10
	C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ..	12	4	98	16	3	121	133	120	197	3	12	123	209	10
Lower Godavari.	A ..	1	..	29	..	4	33	34	24	53	8	15	32	68	2
	B ..	4	..	51	..	36	87	91	33	38	49	76	82	114	9
	C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ..	5	..	80	..	40	120	125	57	91	57	91	114	182	11
Guntur ..	A ..	13	..	79	2	12	93	106	48	101	5	5	53	106	53
	B ..	123	..	176	2	44	222	345	109	218	105	85	214	303	131
	C ..	..	..	35	..	6	41	..	..	..	..	..	..	..	..
	Total ..	136	..	290	4	62	356	451	157	319	110	90	267	409	184

A = Cases taken to Court. B = Cases compounded. C = Cases undetected.

Return of Breaches of Forest Rules during 1930-31—*cont.*

District.	Cases pending from 1929-30.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
FIRST CIRCLE—*cont.*														
***By Revenue Officers*—cont.**														
Nellore .. A ..	3	..	71	..	5	76	79	15	20	44	79	59	99	20
Nellore .. B ..	14	..	282	5	..	287	301	252	469	..	..	252	469	49
Nellore .. C ..	..	..	15	..	..	15	..	..	..	..	..	..	..	..
Nellore .. Total ..	17	..	368	5	5	378	380	267	489	44	79	311	568	69
First Circle Total by Revenue Officers. A ..	19	..	186	6	22	214	233	98	191	60	111	158	302	75
First Circle Total by Revenue Officers. B ..	154	4	613	19	83	719	873	516	923	155	160	671	1,083	202
First Circle Total by Revenue Officers. C ..	..	..	52	..	6	58	..	..	..	..	..	..	..	..
First Circle Total by Revenue Officers. Total ..	173	4	851	25	111	991	1,106	614	1,114	215	271	829	1,385	277
Circle, Grand Total. A ..	268	..	814	264	48	1,126	1,394	377	977	515	1,288	892	2,265	502
Circle, Grand Total. B ..	466	4	1,814	360	151	2,329	2,795	2,124	4,998	218	432	2,342	5,430	453
Circle, Grand Total. C ..	..	176	106	5	7	294	..	..	..	..	..	..	..	..
Circle, Grand Total. Total ..	734	180	2,734	629	206	3,749	4,189	2,501	5,975	733	1,720	3,234	7,695	955
SECOND CIRCLE.														
Reserves under the control of the Forest Department.														
Anantapur A ..	55	..	119	71	16	206	261	73	214	115	342	188	556	73
Anantapur B ..	59	..	162	108	31	301	360	278	671	16	45	294	716	66
Anantapur C ..	..	24	13	..	..	37	..	..	..	..	..	..	..	..
Anantapur Total ..	114	24	294	179	47	544	621	351	885	131	387	482	1,272	139

Kurnool, East.	A	..	10	..	25	26	..	51	61	10	25	51	171	61	196	..
	B	..	18	..	103	88	2	193	211	135	335	34	99	169	434	42
	C	..	..	9	6	...	..	15	..	..	..	..	..	..	..	..
	Total	..	28	9	134	114	2	259	272	145	360	85	270	230	630	42
Kurnool, South.	A	..	42	..	105	34	18	157	199	108	210	88	214	196	424	3
	B	..	48	..	210	90	53	353	401	330	770	3	11	333	781	68
	C	..	..	9	21	..	..	..	..	..	..	..	..	..	..	..
	Total	..	90	9	336	124	71	510	600	438	980	91	225	529	1,205	71
Kurnool, West.	A	..	15	..	125	30	9	164	179	68	276	31	83	99	359	80
	B	..	100	..	202	104	22	328	428	384	886	12	25	396	911	32
	C	..	..	37	16	9	3	65	..	..	..	..	..	..	..	..
	Total	..	115	37	343	143	34	557	607	452	1,162	43	108	495	1,270	112
Cuddapah, North.	A	..	43	..	159	56	6	221	264	112	310	111	304	223	614	41
	B	..	19	..	133	63	10	206	225	165	289	25	89	190	378	35
	C	..	..	..	10	..	..	10	..	..	..	..	..	..	..	..
	Total	..	62	..	302	119	16	437	489	277	599	136	393	413	992	76
Cuddapah, South.	A	..	17	1	101	58	2	162	179	58	167	105	300	163	467	16
	B	..	16	1	199	92	8	300	316	252	582	29	106	281	688	35
	C	..	..	..	10	..	..	..	..	..	..	..	..	..	..	..
	Total	..	33	2	310	150	16	462	495	310	749	134	406	444	1,155	51
Total, Reserves.	A	..	182	1	634	275	51	961	1,143	429	1,202	501	1,414	930	2,616	213
	B	..	260	1	1,009	545	126	1,681	1,941	1,544	3,533	119	375	1,663	3,908	278
	C	..	..	79	76	9	3	167	..	..	..	..	..	..	..	..
Grand total A, B and C Reserves.			442	81	1,719	829	180	2,809	3,084	1,973	4,735	620	1,789	2,593	6,524	491
Unreserves.																
Anantapur.	A	..	14	..	140	..	17	157	171	28	40	133	180	161	220	10
	B	..	62	5	439	..	41	485	547	444	664	13	13	457	677	90
	C	..	..	..	2	..	..	2	..	..	..	..	..	..	..	..
	Total	..	76	5	581	..	58	644	718	472	704	146	193	618	897	100

A = Cases taken to Court. B = Cases compounded. C = Cases undetected

Return of Breaches of Forest Rules during 1930–31—*cont.*

District.		Cases pending from 1929–30.	New cases of the year. Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.	Disposed of during the year. Convictions. Cases.	Convictions. Persons.	Acquittals. Cases.	Acquittals. Persons.	Total. Cases.	Total. Persons.	Cases pending at close of year.
SECOND CIRCLE—*cont.*															
***Unreserves*—cont.**															
Kurnool, East.	A ..	2	..	19	..	..	19	21	5	5	16	25	21	30	..
	B ..	4	..	61	..	..	61	65	53	91	..	..	53	91	12
	C ..	..	..	3	..	..	3	..	..	..	..	..	..	..	..
	Total ..	6	..	83	..	..	83	86	58	96	16	25	74	121	12
Kurnool, South.	A ..	1	..	13	..	..	13	14	3	5	10	11	13	16	1
	B ..	5	..	21	..	..	21	26	18	58	..	..	18	58	8
	C ..	..	..	2	..	..	2	..	..	..	..	..	..	..	..
	Total ..	6	..	36	..	..	36	40	21	63	10	11	31	74	9
Kurnool, West.	A ..	2	..	13	..	..	13	15	13	43	2	2	15	45	..
	B ..	..	2	49	..	2	53	53	44	99	..	..	44	99	9
	C ..	..	..	9	..	..	9	..	..	..	..	..	..	..	..
	Total ..	2	2	71	..	2	75	68	57	142	2	2	59	144	9
Cuddapah, North.	A ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	B ..	..	..	74	6	..	80	80	80	98	..	..	80	98	..
	C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ..	..	..	74	6	..	80	80	80	98	..	..	80	98	..

Cuddapah, South.	A	..	..	..	15	..	..	15	15	15	16	..	..	15	16	..
	B	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total		..	..	15	..	..	15	15	15	16	..	..	15	16	..	
Total, Unreserves.	A	19	..	185	..	17	202	221	49	93	161	218	210	311	11	
	B	71	7	659	6	43	715	786	654	1,026	13	13	667	1,039	119	
	C	..	..	16	..	..	16	..	..	..	..	..	..	..	..	
Grand total, Unreserves A, B & C.		90	7	860	6	60	933	1,007	703	1,119	174	231	877	1,350	130	
Grand total, Reserves and Unreserves.	A	201	1	819	275	68	1,163	1,364	478	1,295	662	1,632	1,140	2,927	224	
	B	331	8	1,668	551	169	2,396	2,727	2,198	4,559	132	388	2,330	4,947	397	
	C	..	79	92	9	3	183	..	..	..	..	..	..	..	..	
Grand total of Reserves and Unreserves A, B & C.		532	88	2,579	835	240	3,742	4,091	2,676	5,854	794	2,020	3,470	7,874	621	

FOURTH CIRCLE.

Reserves.

Chittoor ..	A	137	..	186	89	25	300	437	147	345	219	462	372	845	65	
	B	39	..	163	118	9	240	329	281	450	6	38	302	501	27	
	C	..	51	4	1	..	56	..	..	..	21	51	..	..	..	
Total		176	51	353	208	34	646	766	428	795	246	551	674	1,346	92	
Vellore ..	A	143	..	517	137	10	664	807	115	267	577	1,067	702	1,334	105	
	B	129	1	564	249	11	825	954	691	1,447	10	64	713	1,511	241	
	C	..	..	19	..	..	19	..	..	..	22	..	..	..	..	
Total		272	1	1,100	386	21	1,508	1,761	806	1,714	609	1,131	1,415	2,845	346	
Salem, North.	A	17	1	92	18	7	118	135	38	92	86	174	126	269	9	
	B	20	..	237	93	14	344	364	309	512	2	3	332	558	32	
	C	..	67	..	..	..	67	..	..	..	23	46	..	..	..	
Total		37	68	329	111	21	529	499	347	604	111	223	458	827	41	

A = Cases taken to court. B = Cases compounded. C = Cases undetected.

NOTE.—The difference between the II Circle closing balance of 1929-30 and the opening balance of 1930-31 are due to the transfer of cases from one head to another.

Return of Breaches of Forest Rules during 1930-31—*cont.*

District.	Cases pending from 1929-30.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
FOURTH CIRCLE—*cont.*														
***Reserves*—cont.**														
Salem, Central A * ..	282	..	847	56	9	912	1,194	81	156	† 726	1,617	816	1,773	378
Salem, Central B * ..	101	..	661	98	15	774	875	671	1,092	9 / 10	27	681	1,119	194
Salem, Central C ..	..	84	15	..	..	99	..	..	..	..	..	..	..	..
Salem, Central Total ..	383	84	1,523	154	24	1,785	2,069	752	1,248	745	1,644	1,497	2,892	572
Salem, South. A * ..	43	..	168	11	4	183	226	29	85	† 155	495	195	580	31
Salem, South. B * ..	25	..	296	31	15	342	367	277	639	11 / 17	46	294	685	73
Salem, South. C ..	..	55	12	..	..	67	..	..	..	..	..	..	..	..
Salem, South. Total ..	68	55	476	42	19	592	593	306	724	183	541	489	1,265	104
Total A ..	622	1	1,810	311	55	2,177	2,799	410	945	1,763	3,856	2,211	4,801	588
Total B ..	314	1	1,921	589	64	2,575	2,889	2,229	4,140	38 / 93	234	2,322	4,374	567
Total C ..	..	257	50	1	..	308	..	..	..	..	..	..	..	..
Grand Total ..	936	259	3,781	901	119	5,060	5,688	2,639	5,085	1,894	4,090	4,533	9,175	1,155
***Unreserves*.**														
Chittoor .. A ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chittoor .. B ..	..	..	221	1	7	229	229	229	281	..	..	229	281	..
Chittoor .. C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chittoor .. Total ..	..	..	221	1	7	229	229	229	281	..	..	229	281	..

Vellore ..	A ..	8	1	106	3	4	114	122	7	27	‡107	208	114	235	8
	B ..	773	1	665	..	51	717	1,490	727	1,163	..	..	727	1,163	763
	C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ..	781	2	771	.. 3	55	831	1,612	734	1,190	107	208	841	1,398	771
Salem, North.	A * ..	1	..	35	..	1	36	37	17	22	19	23	36	45	1
	B * ..	5	..	337	..	1	338	343	327	401	1	1	328	402	15
	C ..	..	..	2	..	..	2	..	..	..	..	..	..	..	..
	Total ..	6	..	374	..	2	376	380	344	423	20	24	364	447	16
Salem, Central.	A ‡ ..	8	..	63	..	..	63	71	50	64	5	6	55	70	16
	B ‡ ..	306	..	900	18	42	960	1,266	544	788	331	447	875	1,235	391
	C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ..	314	..	963	18	42	1,023	1,337	594	852	336	453	930	1,305	407
Salem, South.	A ..	10	..	55	..	..	55	65	31	40	29	31	60	71	5
	B ..	113	..	498	..	2	500	613	485	601	..	..	485	601	128
	C ..	3	..	31	..	1	32	..	..	..	..	..	..	..	..
	Total ..	126	..	584	..	3	587	678	516	641	29	31	545	672	133
Total ..	A ..	27	1	259	3	5	268	295	105	153	160	268	265	421	30
	B ..	1,197	1	2,621	19	103	2,744	3,941	2,312	3,234	332	448	2,644	3,682	1,297
	C ..	3	..	33	..	1	34	..	..	..	..	..	..	..	..
Grand Total ..		1,227	2	2,913	22	109	3,046	4,236	2,417	3,387	492	716	2,909	4,103	1,327

Fifth Circle.

Reserves.

Kollegal.	A ..	32	1	66	53	13	133	165	21	78	12	38	146	428	19
											§ 113	312			
	B ..	25	2	125	44	10	181	206	171	335	12	95	183	430	23
	C ..	..	90	5	..	..	95	..	..	..	..	..	..	..	..
	Total ..	57	93	196	97	23	409	371	192	413	137	445	329	858	42

A = Cases taken to Court. B = Cases compounded. C = Cases undetected.

Note for Fourth Circle—

* The difference in the opening balance under (A and B) is due to transfer of cases from B to A.

† Represents cases where compounding fees were paid in Court.

‡ The difference is due to actuals as furnished in Taluk returns.

Note for Fifth Circle—

§ Cases settled by payment of compounding fees in Court.

Return of Breaches of Forest Rules during 1930-31—*cont.*

District.	Cases pending from 1929-30.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
FIFTH CIRCLE—*cont.*														
***Reserves*—cont.**														
Coimbatore, North. A	27	..	143	27	6	176	203	60	177	83	219	143	396	60
Coimbatore, North. B	38	2	201	93	3	299	337	270	637	31	97	301	734	36
Coimbatore, North. C	..	..	2	..	..	2	..	..	..	..	..	..	..	..
Coimbatore, North. Total	65	2	346	120	9	477	540	330	814	114	316	444	1,130	96
Coimbatore, South. A	24	..	37	5	27	69	93	11	22	59	137	70	159	23
Coimbatore, South. B	10	..	65	11	10	86	96	74	207	6	21	80	228	16
Coimbatore, South. C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Coimbatore, South. Total	34	..	102	16	37	155	189	85	229	65	158	150	387	39
Madura A	381	2	804	106	9	921	1,362	501	1,848	523	1,539	1,026	3,387	276
Madura B	45	3	394	92	28	517	562	361	708	* 2	100	397	808	165
Madura C	..	132	..	..	..	132	..	..	..	36	..	..	..	..
Madura Total	426	137	1,198	198	37	1,570	1,864	862	2,556	561	1,639	1,423	4,195	441
Tinnevelly A	38	4	165	32	4	205	243	113	193	91	204	204	397	39
Tinnevelly B	78	..	325	120	3	448	526	66	98	396	885	462	983	64
Tinnevelly C	..	2	3	..	..	5	..	..	..	..	..	..	..	..
Tinnevelly Total	116	6	493	152	7	658	769	179	291	487	1,089	666	1,380	103

Circle Total.	A	..	502	7	1,215	223	59	1,504	2,006	706	2,318	883	2,449	1,589	4,767	417
	B	..	196	7	1,110	360	54	1,531	1,727	942	1,985	481	1,198	1,423	3,183	304
	C	..	..	224	10	..	..	234	..	..	..	..	..	..	..	..
	Total	..	698	238	2,335	583	113	3,269	3,733	1,648	4,303	1,364	3,647	3,012	7,950	721
Unreserves.																
Kollegal..	A	..	1	..	9	..	..	9	10	..	..	2	2	4	4	6
	B	..	3	1	56	..	..	57	60	53	90	† 2	2	53	90	7
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	4	1	65	..	..	66	70	53	90	4	4	57	94	13
Coimbatore, North.	A	..	..	..	9	..	..	9	9	3	3	6	9	9	12	..
	B	..	13	..	102	..	11	113	126	111	169	..	..	111	169	15
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	13	..	111	..	11	122	135	114	172	6	9	120	181	15
Coimbatore, South.	A	..	..	..	9	..	..	9	9	..	..	6	7	6	7	3
	B	..	7	..	54	..	14	68	75	67	105	..	..	67	105	8
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	7	..	63	..	14	77	84	67	105	6	7	73	112	11
Madura ..	A	..	63	..	72	8	1	81	144	82	112	32	78	114	190	30
	B	..	108	..	472	18	9	499	607	393	736	2	3	395	739	212
	C	..	..	..	4	..	..	4	..	..	..	..	..	..	..	..
	Total	..	171	..	548	26	10	584	751	475	848	34	81	509	929	242
Tinnevelly	A	..	5	4	45	2	7	58	63	11	13	47	63	58	76	5
	B	..	49	..	154	10	108	272	321	17	22	251	446	268	468	53
	C	..	..	..	7	..	..	7	..	..	..	..	..	..	..	..
	Total	..	54	4	206	12	115	337	384	28	35	298	509	326	544	58

A = Cases taken to Court.

B = Cases compounded and withdrawn.

* Withdrawn after taking to Court.

† Case settled by payment of compounding fee in Court.

C = Cases undetected.

Return of Breaches of Forest Rules during 1930-31—*cont.*

District.	Cases pending from 1929-1930.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
FIFTH CIRCLE—*cont.*														
***Unreserves*—cont.**														
Circle total. A	69	4	144	10	8	166	235	96	128	95	161	191	289	44
B	180	1	838	28	142	1,009	1,189	641	1,122	253	449	894	1,571	295
C	..	..	11	..	..	11	..	..	..	..	..	..	..	..
Total, Unreserves..	249	5	993	38	150	1,186	1,424	737	1,250	348	610	1,085	1,860	339
,, Reserves ..	698	238	2,335	583	113	3,269	3,733	1,648	4,303	1,364	3,647	3,012	7,950	721
Grand Total ..	947	243	3,328	621	263	4,455	5,157	2,385	5,553	1,712	4,257	4,097	9,810	1,060

NOTE.—The difference between the closing balance of 1929-30 and the opening balance of 1930-31 is due to transfer of cases from one head to another.

SIXTH CIRCLE.

Reserved Forest.

Mangalore, North. A	(e) 2	..	6	1	2	9	11	1	1	(f) 1	2	2	3	9
B	(e) 49	..	163	36	16	215	264	199	298	(d) 3	8	202	306	62
C	..	81	..	..	..	81	81	..	..	..	..	..	..	..
Total ..	51	81	169	37	18	305	356	200	299	4	10	204	309	71
Mangalore, South. A	(e) 25	4	24	8	7	43	68	17	27	(g) 6	25	53	114	15
B	(e) 17	12	121	34	18	185	202	120	231	(f) 30	62	151	310	51
C	..	124	..	..	..	124	124	..	..	(d) 31	79	..	..	..
Total ..	42	140	145	42	25	352	394	137	258	67	166	204	424	66

Wynaad.	A	..	..	1	1	..	1	3	3	..	..	1	2	1	2	2
	B	..	7	2	13	10	5	30	37	24	39	(d) 2, (f) 2	4	28	47	9
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	7	3	14	10	6	33	40	24	39	5	10	29	49	11
Nilambur.	A	..	..	..	2	3	1	6	6	4	11	(f) 1, 1	1, 1	6	13	..
	B	..	2	..	2	5	2	9	11	10	22	1	10	11	32	..
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	2	..	4	8	3	15	17	14	33	3	12	17	45	..
The Nilgiris.	A	..	(e) 8	..	3	7	3	13	21	11	40	2	8	13	48	8
	B	..	(e) 144	5	54	151	246	456	600	448	966	8	12	456	978	144
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	152	5	57	158	249	469	621	459	1,006	10	20	469	1,026	152
Palghat.	A	..	3	..	20	2	1	23	26	16	33	(g) 1	1	17	34	9
	B	..	41	..	114	11	11	136	177	94, (f) 47	356	(d) 7	25	148	381	29
	C	..	..	28	..	..	..	28	28	..	..	28	..	..	..	..
	Total	..	44	28	134	13	12	187	231	157	389	36	26	165	415	38
Total-sixth circle.	A	..	(e) 38	5	56	21	15	97	135	49	112	43	102	92	214	43
	B	..	(e) 260	19	467	247	298	1,031	1,291	942	1,912	54	142	996	2,054	295
	C	..	..	233	..	..	..	233	233	..	..	..	..	..	..	..
	Total	..	298	257	523	268	313	1,361	1,659	991	2,024	97	244	1,088	2,268	338
Unreserves.																
Mangalore, North.	A	..	(e) 10	..	30	..	1	31	41	13	15	(g) 4, (f) 8	6, 9	25	30	16
	B	..	(e) 21	..	158	..	9	167	188	136	173	(d) 1	1	137	174	51
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	31	..	188	..	10	198	229	149	188	13	16	162	204	67

A = Cases taken to Court. B = Cases compounded and withdrawn. C = Cases undetected.

(d) Cases withdrawn.
(e) Differences between the closing balance of 1929-30 and the opening balance of 1930-31 are due to the transfer of cases from one head to another.
(f) Acquitted by Magistrate after payment of compounding fees in court.
(g) Acquitted by Magistrate for want of evidence.

Return of Breaches of Forest Rules during 1930-31—*cont.*

District.	Cases pending from 1929-30.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
SIXTH CIRCLE—*cont.*														
***Unreserves*—cont.**														
Mangalore, South. A	(e) 40	57	26	..	..	83	123	42	71	(g)14	44	96	160	27
B	(e) 60	57	75	..	4	136	196	156	182	(f)10 / (g)15	45 / 48	171	230	25
C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	100	114	101	..	4	219	319	198	253	69	137	267	390	52
Wynaad. A	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B	1	3	9	..	..	12	13	13	13	..	..	13	13	..
C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	1	3	9	..	..	12	13	13	13	..	..	13	13	..
Palghat. A	2	..	..	..	..	..	2	2	2	..	..	2	2	..
B	27	..	79	..	35	114	141	109	200	6	16	115	216	26
C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	29	..	79	..	35	114	143	111	202	6	16	117	218	26
Total Unreserves, Sixth circle. A	52	57	56	..	1	114	166	57	88	66	104	123	192	43
B	109	60	321	..	48	429	538	414	568	22	65	436	633	102
C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	161	117	377	..	49	543	704	471	656	88	169	559	825	145

Total, Reserves and Unreserves.	A ..	90	62	112	21	16	211	301	106	200	109	206	215	406	86
	B ..	369	79	788	247	346	1,460	1,829	1,356	2,480	76	207	1,432	2,687	397
	C ..	..	233	..	..	..	233	233	..	..	..	..	..	..	..
Total ..		459	374	900	268	362	1,904	2,363	1,462	2,680	185	413	1,647	3,093	483
Parlakimedi Maliahs	A ..	32	3	35	3	1	42	74	18	74	25	108	43	182	31
	B ..	12	1	105	11	9	126	138	109	407	10	28	119	435	19
	C ..	..	32	..	..	..	32	..	..	..	..	..	..	..	..
Total ..		44	36	140	14	10	200	212	127	481	35	136	162	617	50
Total Departmental forests.	A ..	1,593	14	4,343	1,088	206	5,651	7,244	1,873	5,363	3,683	8,998	5,556	14,361	1,688
	B ..	1,342	28	5,708	2,082	610	8,428	9,770	7,265	15,645	810	2,221	8,075	17,866	1,695
	C ..	..	969	190	15	4	1,178	..	..	..	..	..	..	..	..
Total .		2,935	1,011	10,241	3,185	820	15,257	17,014	9,138	21,008	4,493	11,219	13,631	32,227	3,383
Total, Unreserves.	A ..	400	66	1,499	297	105	1,967	2,367	852	1,929	1,068	2,384	1,920	4,313	447
	B ..	1,983	75	6,166	628	554	7,423	9,406	6,100	10,813	904	1,538	7,094	12,351	2,312
	C ..	3	32	112	..	7	151	..	..	..	..	..	..	..	..
		2,386	173	7,777	925	666	9,541	11,773	6,952	12,742	1,972	3,922	9,014	16,664	2,759
Total, Presidency.	A ..	1,993	80	5,842	1,385	311	7,618	9,611	2,725	7,292	4,751	11,382	7,476	18,674	2,135
	B ..	3,325	103	11,874	2,710	1,164	15,851	19,176	13,365	26,458	1,714	3,759	15,169	30,217	4,007
	C ..	3	1,001	302	15	11	1,329	..	..	..	..	..	..	..	..
Grand Total, Presidency.		5,321	1,184	18,018	4,110	1,486	24,798	28,787	16,090	33,750	6,465	15,141	22,645	48,891	6,142

(e) Differences between the closing balance of 1929–30 and the opening balance of 1930–31 are due to the transfer of cases from one head to another.
(f) Acquitted by Magistrate after payment of compounding fees in court.
(g) Acquitted by Magistrate for want of evidence.

Annual Form No. 31.

Forest Department, Madras Presidency.

Area of forest tracts protected from fire during the calendar year 1930.

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.
			Area attempted to be protected.	Fires.	Actually protected.	
	First Circle.	ACS.	ACS.	ACS.	ACS.	RS.
Ganjam ..	Special protection ..	53,233	54,998	3,468	51,530	3,820
	General do. ..	200,127	215,459	42,640	172,819	2,762
	Total ..	253,360	270,457	46,108	224,349	6,582
Vizagapatam.	Special protection ..	79,118	79,119	6,349	72,770	350
	General do. ..	17,738	17,738	1,260	16,478	66
	Total ..	96,856	96,857	7,609	89,248	416
Godavari, Upper.	Special protection ..	364,733	530,150	162,976	367,174	3,493
	General do. ..	1,138	1,140	..	1,140	..
	Total ..	365,871	531,290	162,976	368,314	3,493
Godavari, Lower.	Special protection ..	116,280	116,854	6,029	110,825	1,598
	General do. ..	111,419	99,563	1,315	98,248	374
	Total ..	227,699	216,417	7,344	209,073	1,972
Guntur ..	Special protection ..	..	..	..	..	..
	General do. ..	326,879	332,736	2,889	329,847	..
	Total ..	326,879	332,736	2,889	329,847	..
Nellore ..	Special protection ..	137,237	115,029	4,241	110,788	310
	General do. ..	122,437	123,129	230	122,899	..
	Total ..	259,674	238,158	4,471	233,687	310
Total, First Circle.	Special protection ..	750,601	896,150	183,063	713,087	9,571
	General do. ..	779,738	789,765	48,334	741,431	3,202
	Grand Total ..	1,530,339	1,685,915	231,397	1,454,518	12,773
	Second Circle.					
Anantapur.	Special protection by a system of fire lines.	15,453	16,329	393	15,936	51
	Early burning ..	24,843	25,627	2,235	23,392	145
	General protection ..	314,113	329,735	5,520	324,215	..
	Total ..	354,409	371,691	8,148	363,543	196
Kurnool, East.	Early burning ..	74,656	87,320	232	87,088	500
	General protection ..	491,904	517,254	..	517,254	191
	Total ..	566,560	604,574	232	604,342	691

Area of forest tracts protected from fire during the calendar year 1930—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.
			Area attempted to be protected.	Fires.	Actually protected.	
	Second Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS. A.
Kurnool, South.	Early burning ..	93,299	171,219	156	171,063	468 0
	General protection ..	289,355	259,159	1,600	257,559	..
	Total ..	382,654	430,378	1,756	428,622	468 0
Kurnool, West.	Special protection by a system of fire lines.	3,888	3,888	500	3,388	38 0
	Early burning ..	8,410	7,180	..	7,180	724 0
	General protection ..	510,167	538,366	1,938	536,428	1,114 0
	Total ..	522,465	549,434	2,438	546,996	1,876 0
Cuddapah, North.	Early burning ..	30,968	30,968	3,345	27,623	157 0
	General protection ..	371,628	454,263	63,219	391,044	103 0
	Total ..	402,596	485,231	66,564	418,667	260 0
Cuddapah, South.	Special protection ..	33,786	46,818	12,227	34,591	117 0
	Early burning ..	46,904	61,312	318	60,994	411 0
	General protection ..	330,844	321,052	11,331	309,721	229 0
	Total ..	411,528	429,182	23,876	405,306	757 0
Total, Second Circle.	Special protection ..	53,121	67,035	13,120	53,915	206 0
	Early burning ..	279,080	383,626	6,286	377,340	2,405 0
	General protection ..	2,308,011	2,419,829	83,608	2,336,221	1,637 0
	Grand Total ..	2,640,212	2,870,490	103,014	2,767,476	4,248 0
	Fourth Circle.					
Chittoor ..	Special protection ..	35,744	38,423	2,490	35,933	489 5
	General do. ..	326,490	331,277	2,290	328,987	..
	Total ..	362,234	369,700	4,780	364,920	489 5
Vellore ..	Special protection ..	187,372	192,605	2,257	190,348	2,218 0
	General do. ..	251,935	253,645	2,830	250,815	..
	Total ..	439,307	446,250	5,087	441,163	2,218 0
Salem, North.	Special protection ..	61,136	66,448	3,653	62,795	560 3
	General do. ..	271,649	296,633	24,298	272,335	..
	Total ..	332,785	363,081	27,951	335,130	560 3
Salem, Central.	Special protection ..	246,295	249,159	2,180	246,979	1,649 0
	General do. ..	206,616	206,824	323	206,501	..
	Total ..	452,911	455,983	2,503	453,480	1,649 0

Area of forest tracts protected from fire during the calendar year 1930—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.
			Area attempted to be protected.	Fires.	Actually protected.	
	Fourth Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS. A.
Salem, South.	Special protection ..	144,971	124,355	712	1,23,643	1,967 2
	General do. ..	37,310	39,752	665	39,087	..
	Total ..	182,281	164,107	1,377	162,730	1,967 2
Total, Fourth Circle.	Special protection ..	675,518	670,990	11,292	659,698	6,884 0
	General do. ..	1,094,000	1,128,131	30,406	1,097,725	..
	Grand Total ..	1,769,518	1,799,121	41,698	1,757,423	6,884 0
	Fifth Circle.					
Kollegal..	Special protection ..	32,359	17,984	..	17,984	457 0
	Early burning ..	17,726	..	..	..	..
	General protection ..	542,859	587,846	44,102	543,744	280 0
	Total ..	592,944	605,830	44,102	561,728	737 0
North Coimbatore.	Special protection ..	2,867	1,065	202	863	134 0
	Early burning ..	17,600	25,640	..	25,640	288 0
	General protection ..	490,166	505,693	19,441	486,252	1,108 0
	Total ..	510,633	532,398	19,643	512,755	1,530 0
South Coimbatore.	Special protection ..	4,589	4,813	141	4,672	1,777 0
	Early burning ..	90	90	..	90	41 0
	General protection ..	232,974	241,939	1,208	240,731	42 0
	Total ..	237,653	246,842	1,349	245,493	1,860 * 0
Madura ..	Special protection ..	89,045	89,495	4,6 0	84,805	2,214 0
	Early burning ..	128,005	129,222	820	128,402	974 0
	General protection ..	192,047	194,789	2,419	192,370	..
	Total ..	409,097	413,506	7,929	405,577	3,188 0
Tinnevelly.	Special protection ..	132,662	135,537	5,467	130,070	381 0
	Early burning ..	..	..	..	..	..
	General protection ..	104,492	107,400	1,309	106,091	..
	Total ..	237,154	242,937	6,776	236,161	381 0
Circle, Total.	Special protection ..	261,522	248,894	10,520	238,394	4,963 0
	Early burning ..	163,421	154,952	820	154,152	1,303 0
	General protection ..	1,562,538	1,637,667	68,479	1,569,188	1,430 0
	Grand Total ..	1,987,481	2,041,513	79,799	1,961,714	7,696 0
	Sixth Circle.					
Mangalore, North.	Early burning ..	7,103	3,455	..	3,455	54 0
	Special protection ..	68,394	68,765	2,140	66,625	1,766 0
	General do. ..	153,503	157,676	912	156,764	290 0
	Total ..	229,000	229,896	3,052	226,844	2,110 0

* Excludes Rs. 433 spent in 1929-30 but adjusted by Mount Stuart Commercial concern in 1930-31.

Area of forest tracts protected from fire during the calendar year 1930—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.
			Area attempted to be protected.	Fires.	Actually protected.	
	Sixth Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS.
Mangalore, South.	Special protection ..	(*a*) 283,905	286,519	3,188	283,331	1,821 *
Wynaad..	Early burning ..	47,935	47,935	..	47,935	78
	Special protection ..	101,977	112,646	8,341	104,305	1,905
	General protection ..	(*b*) 7,530	7,530	470	7,060	..
	Total ..	157,442	168,111	8,811	159,300	1,983
Nilambur ..	Special protection ..	80,169	80,289	30	80,259	3,699 *
The Nilgiris.	Special protection ..	70,985	81,265	3,789	77,476	2,919 *
	General do. ..	223,374	228,477	5,670	222,807	..
	Total ..	294,359	309,742	9,459	300,283	2,919
Palghat ..	Special protection ..	115,327	116,772	2,678	114,094	2,681 *
	General do. ..	47,188	47,380	2,948	44,432	..
	Total ..	162,515	164,152	5,626	158,526	2,681
Total, Sixth Circle.	Early burning ..	55,038	51,390	..	51,390	132
	Special protection ..	720,757	746,256	20,165	726,090	14,791
	General do. ..	431,595	441,063	9,844	431,063	290
	Total ..	1,207,390	1,238,709	30,166	1,208,543	15,213
Parlakimedi Maliahs.	General protection ..	112,112	112,895	5,347	107,548	592
Total, Presidency.	Special protection ..	2,461,519	2,629,325	238,160	2,391,184	31,415
	Early burning ..	497,539	589,968	7,106	582,862	3,840
	General protection ..	6,287,994	6,529,350	246,018	6,283,176	7,151
	Total ..	9,247,052	9,748,643	491,284	9,257,222	47,406

* No early burning.

(*a*) This includes the area of five reserved blocks notified under section 4 of the Forest Act.
(*b*) Omitted in the last year's return by mistake.

Annual Form No. 32.

Forest Department, Madras Presidency.

Area closed and open to grazing during 1930–31.

Districts.	Closed to all animals.		Open to grazing.			
			Of all animals except goats.		Of all animals except browsers (sheep and goats).	
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.	Part of year.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
First Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Reserved Forests.						
Ganjam	105	..	520	..	..	..
Vizagapatam	11	..	204	..	59	..
Godavari, Upper ..	4	..	826	..	..	..
Do. Lower ..	91	..	400	..	..	..
Guntur	62	..	218	..	332	..
Nellore	155	185	32	..	..	..
Total ..	428	185	2,200	..	391	..
Reserved Lands.						
Vizagapatam	..	..	2	..	..	..
Godavari, Upper ..	..	..	19	..	..	..
Do. Lower ..	..	..	40	..	..	..
Guntur	..	..	1	..	..	..
Total ..	..	..	62	..	..	..
Grand Total ..	428	185	2,262	..	391	..
Second Circle.						
Anantapur	22	2	550	2	..	..
Kurnool, East	2	..	906	37	..	..
Do. South ..	34	..	631	..	..	..
Do. West	11	..	843	..	..	..
Cuddapah, North ..	32	..	726	..	..	..
Do. South ..	77	..	594	..	..	..
Total ..	178	2	4,250	39	..	..
Fourth Circle.						
Reserved Forests.						
Chittoor	119	..	459	..	..	..
Vellore	41	..	665	..	..	..
Salem, North	17	..	550	..	..	..
Do. Central	24	..	689	..	..	..
Do. South	5	..	251	..	..	..
Total ..	206	..	2,614	..	..	..

Area closed and open to grazing during 1930–31—*cont.*

Districts.	Closed to all animals.		Open to grazing.			
			Of all animals except goats.		Of all animals except browsers (sheep and goats).	
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.	Part of year.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
FOURTH CIRCLE—*cont.*	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Reserved Lands.						
Chittoor	..	..	..	..	..	..
Vellore	..	..	..	..	..	..
Salem, North	..	..	..	..	..	..
Do. Central	..	..	6	..	..	..
Do. South	..	..	30	..	..	..
Total ..	..	..	36	..	..	..
FIFTH CIRCLE.						
Reserved Forests.						
Kollegal	52	..	895	..	..	..
Coimbatore, North ..	23	..	809	..	..	..
Do. South ..	214	..	172	..	..	..
Madura	127	..	324	..	195	..
Tinnevelly	225	2	171	..	..	9
Total ..	641	2	2,371	..	195	9
SIXTH CIRCLE.						
Reserved Forests.						
Mangalore, North ..	25	..	334	..	..	..
Do. South ..	11	..	427	..	..	..
Wynaad	2	..	261	..	..	..
Nilambur	108	..	..	..	..	..
The Nilgiris	23	..	461	..	..	..
Palghat	143	..	100	..	10	..
Total ..	312	..	1,583	..	10	..
Reserved Lands.						
Mangalore, South ..	..	..	9	..	..	..
Nilambur	18	..	..	..	..	..
The Nilgiris	..	..	6	..	..	..
Total ..	18	..	15	..	..	..
Grand Total ..	330	..	1,598	..	10	..
Parlakimedi Maliahs ..	3	..	173	..	..	..
Grand total, Presidency, Reserves.	1,765	189	13,018	39	596	9
Reserved Lands ..	21	..	286	..	..	..
Total ..	1,786	189	13,304	39	596	9

ANNUAL FORM No. 33.

Forest Department, Madras Presidency.

Return of grazing in the State forests during 1930–31.

District.	Grazing on payment—Number of animals.									
	At enhanced or special rates.					At full rates.				
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
FIRST CIRCLE.					RS.					RS.
Reserved Forests.										
Ganjam	..	..	..	..	..	(*a*) 5,790	(*a*) 36,860	(*a*) 566	..	9,136 (*f*) 12
Vizagapatam ..	(*b*) 200	(*b*) 2,831	(*b*) 75	..	1,634	(*a*) 52	(*a*) 3,827	..	..	737
Godavari, Upper.	..	..	..	..		..	..	..	..	..
Do. Lower.	(*c*) 7,352	(*c*) 3,884	(*c*) 68	..	6,983	(*a*) 295	(*a*) 7,405	..	..	(*a*) 1,499 (*h*) 1,099
Guntur	(*g*) 63	(*g*) 1,198	..	..	1,324	(*b*) 6,754 (*c*) 722	(*b*) 43,926 (*c*) 2,650	(*b*) 59,492 7,540	..	(*b*) 43,590 (*c*) 1,475 (*h*) 1,134
Nellore	..	..	..	..	..	156	1,396 (*k*) 32,803	629	..	972 (*f*) 20,686
Total ..	7,615	7,913	143	..	9,941	13,769	1,28,867	68,227	..	80,340
Unreserved Lands.										
Rampa	6,806	5,555	..	..	7,188	..	..	..	..	..
Grand Total ..	14,421	13,468	143	..	17,129	13,769	1,28,867	68,227	..	80,340

Return of grazing in the State forests during 1930-31—*cont.*

District.	Grazing on payment—Number of animals—*cont.*						Grazing free—Number of animals.										Total value of fees at full rates.	Grand total of value at full rates.
	At privileged rates.						By right under settlement.					During pleasure of Government or otherwise than under settlement.						
					Fees received.													
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Actual.	Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.		
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
FIRST CIRCLE —*cont.*					RS.	RS.					RS.					RS.	RS.	RS.
Ganjam ..	..	..	..	..	..	..	(*a*) 100	(*a*) 800	..	..	187	501	3,524	209	..	868	1,055	10,016
Vizagapatam ..	..	..	..	..	..	..	..	..	..	..	..	..	(*a*) 5,006 (*b*) 342	..	..	1,110	1,110	3,481
Godavari, Upper.	(*e*) 6,963	(*e*)47,316	(*e*) 9,865	..	8,272	12,408	..	..	..	..	..	5,323	46,063	..	..	10,633	10,633	23,041
Do. Lower.	(*d*) 459	(*d*)15,783	..	..	(*d*) 1,015	3,131	..	..	..	..	..	645	10,487	..	..	2,208	2,208	14,021
Guntur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	47,523
Nellore .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	(*j*)21,658
Total ..	7,422	63,099	9,865	..	9,287	15,539	100	800	..	..	187	6,469	65,422	209	..	14,819	15,006	1,19,740
Unreserved Lands —cont.																		
Rampa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7,188
Grand Total ..	7,422	63,099	9,865	..	9,287	15,539	100	800	..	..	187	6,469	65,422	209	..	14,819	15,006	1,26,928

Note for First Circle—

(*a*) Six annas per buffaloe, 3 annas per cow or bullock and 1 anna 6 pies per sheep.
(*b*) One rupee per buffaloe, 8 annas per cow or bullock and 4 annas per sheep.
(*c*) Twelve annas per buffaloe, 6 annas per cow or bullock and 3 annas per sheep.
(*d*) One anna per buffaloe or cow.
(*e*) Four annas per buffaloe, 2 annas per cow or bullock and one anna per sheep.
(*f*) Kancha fees realized.
(*g*) One rupee per plough bull.
(*h*) Sale-proceeds of grass.
(*j*) Excludes Rs. 81 being outstandings of previous year collected during the year.
(*k*) Kancha revenue converted into number of cow units as per instructions in Chief Conservator's Proceedings No. 335, Press, dated 5th December 1924.

Return of grazing in the State forests during 1930-31—*cont.*

District.	Grazing on payment—Number of animals.									
	At enhanced or special rates.					At full rates.				
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
SECOND CIRCLE.					RS.					RS.
Anantapur ..	..	..	..	..	..	(a) 572	(a) 15,354	(a) 19,871	..	13,217
						(b) 889	(b) 14,123	(b) 9,261	..	7,699
						(c) 1,209	(c) 5,956	(c) 12,639	..	2,755
							(d) 152	..	..	152
Kurnool, East.	..	..	..	..	..	(a) 3,712	(a) 17,363	(d) 38,146	..	21,002
	..					Calves.	(d) 390	(e) 250	..	129
						(b) 546	(b) 6,610	(b) 176	..	7,790
Do. South.	..	..	..	..	..	(a) 3,976	(a) 14,179	(a) 26,946	..	16,808
						..	(n) 1,122	..	..	(n) 570
Do. West.	..	..	..	..	..	(a) 6,645	(a) 27,799	(a) 37,034	..	28,142
						(b) 22	(b) 5,808	(b) 29	(f) 1	5,867
Cuddapah, North.	..	..	..	..	..	(h) 3,571	(h) 12,398	(h) 49,243	..	16,561
						..	(g) 11,034	..	..	11,034
Cuddapah, South.	..	(g) 120	..	..	120	(h) 399	(h) 18,289	(h) 26,828	..	14,984
						..	(l) 2,796	..	..	..
Total ..	..	120	..	..	120	21,541	153,373	220,423	1	1,46,710

Return of grazing in the State forests during 1930-31—*cont.*

District.	Grazing on payment—Number of animals—*cont.*						Grazing free—Number of animals.										
	At privileged rates.						By right under settlement.					During pleasure of Government or otherwise than under settlement.					
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.		Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.
					Actual.	Value at full rates.											
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
SECOND CIRCLE —*cont.*					Rs.	Rs.										Rs.	Rs.	Rs.
Anantapur ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23,828
Kurnool, East.	..	..	..	..	..	..	(*b*) 356	(*b*) 894	(*b*) 1,991	..	2,601	..	..	..	..	..	2,601	31,522
Do. South.	..	..	..	..	..	..	(*a*) 21	(*a*) 40	(*a*) 126	..	66	(*a*) 3	(*a*) 43	..	..	24	90	17,468
Do. West.	..	..	..	..	..	..	(*a*) 255	(*a*) 875	(*a*) 1,198	..	928	..	..	..	..	..	928	34,937
Cuddapah, North.	..	(*i*) 405 (*j*) 126	(*k*) 350	..	95	265	..	..	..	..	..	(*h*) 49	..	..	..	37	37	27,897
Cuddapah, South.	..	..	..	..	..	..	..	(*h*) 518	..	..	194	..	..	..	..	..	194	15,298
Total ..	..	531	350	..	95	265	632	2,327	3,315	..	3,789	52	43	..	..	61	3,850	1,50,945

Note for Second Circle—

I. Anantapur—
- (*a*) Buffaloes at Re. 1 , cows at 8 annas ; sheep at 4 annas.
- (*b*) Buffaloes at 12 annas ; cows at 6 annas ; sheep at 3 annas.
- (*c*) Buffaloes at 6 annas ; cows at 3 annas ; sheep at 1½ annas.
- (*d*) Cows at Re. 1.

II. 3 Kurnool divisions—
- (*a*) Buffaloes at 12 annas ; cows at 8 annas ; sheep at 4 annas.
- (*b*) Buffaloes at Rs. 2 ; cows at Re. 1 ; sheep at 8 annas.
- (*d*) Non-penta calf (cow) at 4 annas.
- (*e*) Lamb at 2 annas.
- (*f*) Horse (other animals) at Re. 1.
- (*m*) Kancha fees realized.
- (*n*) Kancha revenue converted into number of cow units as per instructions in Chief Conservator's Ref. No. 335, dated 5th December 1924.

III. North Cuddapah division—
- (*g*) Cows at Re. 1 (foreign).
- (*h*) Buffaloes at 12 annas ; cows at 6 annas ; sheep at 3 annas.
- (*i*) Cows at 3 annas. | (*k*) Sheep at ½ anna.
- (*j*) Cows at 1 anna.

IV. South Cuddapah division—
- (*g*) Cows at Re. 1, enhanced rate sanctioned in G.O. Mis. No. 1270, Development, dated 5th August 1927, as a punitive measure to the villagers of Guvalacheruvu and its hamlets.
- (*h*) Buffaloes at 12 annas ; cows at 6 annas ; sheep at 3 annas.
- (*l*) Cows at Re. 1 (foreign).

Return of grazing in the State forests during 1930–31—*cont.*

District.	Grazing on payment—Number of animals.									
	At enhanced or special rates.					At full rates.				
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
FOURTH CIRCLE.					RS.					RS.
Chittoor	..	..	..	..	..	(*a*) 255	13,055	7,333	..	8,616
						(*b*) 679	35,875	9,201	..	15,687
Vellore	(*c*) 9	2,669	..	..	2,687	(*a*) .558	57,882	25,351	..	35,837
Salem, North ..	..	..	..	..	..	(*e*) 1,578	54,515	1,634	..	28,849
								(*b*) 2,506		470
										(*f*) 55
Do. Central ..	..	9,097	..	..	9,097	(*g*) 120	44,460	11,714	..	28,438
						(*e*) 224	36,510	1,380		18,768
								(*b*) 21,148		3,965
Do. South ..	..	..	..	..	..	(*g*) 3	21,208	27,675	..	19,717
						..	(*b*) 7,280	3,275		3,344
Total ..	9	11,766	..	..	11,784	3,417	270,785	111,217	..	1,63,746

Return of grazing in the State forests during 1930–31—*cont.*

District.	Grazing on payment—Number of animals—*cont.*						Grazing free—Number of animals.										Grand total of value at full rates.
	At privileged rates.						By right under settlement.					During pleasure of Government or otherwise than under settlement.					
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.		Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	
					Actual.	Value at full rates.												
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
FOURTH CIRCLE —*cont.*					Rs.	Rs.												Rs.
Chittoor ..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vellore ..	(*b*) 12	198	15	..	86	115	..	..	..	..	..	..	..	..	...	..	..	24,303
	(*d*) 3,937	27,192	5,567	23	7,101	18,936												57,575
Salem, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. Central ..	..	11,190	..	..	(*h*) 1,398	6,294	..	..	..	..	..	..	..	..	..	..	..	29,374
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	66,562
																		23,061
Total ..	3,949	38,580	5,582	23	8,585	25,345	..	..	..	..	..	..	..	..	..	..	..	2,00,875

Note for Fourth Circle—

One buffaloe = 2 cows = 4 sheep.

(*a*) Eight annas per cow unit.
(*b*) Six annas per cow unit.
(*c*) One rupee per cow unit.
(*d*) Three annas per cow unit.
(*e*) Twelve annas per buffaloe, eight annas per cow, four annas per sheep.
(*f*) Revenue realized by issue of permits to permit issuing officers.
(*g*) Nine annas per cow unit.
(*h*) Grazing assessment for 11,190 cow units at two annas per cow unit in Attur and Harur ranges.

Return of grazing in the State forests during 1930–31—*cont.*

District.	Grazing on payment—Number of animals.									
	At enhanced or special rates.					At full rates.				
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Fifth Circle.										Rs.
Kollegal ..	..	..	..	..	..	4,572	78,605	6,920	..	(*d*) 45,604
Coimbatore, North.	..	..	..	..	..	3,088	57,636	17,485	..	(*e*) 36,277
Coimbatore, South.	..	..	..	..	..	(*a*) 330	(*b*) 8,322	494	(*c*) 1	(*f*) 4,666
Madura	..	..	..	..	..	59	32,284	7,525	..	24,478
Tinnevelly ..	..	..	..	..	..	340	12,011	12,961	..	8,426
Total ..	..	..	..	..	..	8,389	1,88,858	45,385	1	1,19,451

Note for Fifth Circle—

(*a*) Includes 5 buffaloes at Rs. 2-8-0 each in Punachi Range instead of rupee one.
(*b*) Includes 17 bulls and cows at Rs. 2-8-0 each in Punachi Range instead of As. 8.
(*c*) One Elephant at Rs. 10 each.
(*d*) Excludes Rs. 10 realized by sale of fodder grass.
(*e*) Excludes Rs. 1,202 realized by sale of fodder grass.
(*f*) Includes Rs. 32 realized by the Mount Stuart Commercial concern.

Return of grazing in the State forests during 1930-31—*cont.*

District.	Grazing on payment—Number of animals—*cont.*						Grazing free—Number of animals.										Grand total of value at full rates.
	At privileged rates.						By right under settlement					During pleasure of Government or otherwise than under settlement.					
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.		Buffaloes.	Cows and bullocks.	Goats and sheeps.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	
					Actual.	Value at full rates.												
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
FIFTH CIRCLE —*cont.*					RS. A. P.	RS.					RS.							RS.
Kollegal ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	45,604
Coimbatore, North.	..	(*b*) 30	..	..	3 12 0	15	..	..	..	..	..	..	..	..	..	..	..	36,292
Coimbatore, South.	..	..	..	..	..	..	..	(*a*) 30	..	..	15	..	..	..	..	..	..	4,681
Madura ..	..	..	..	..	..	..	578	4,509	..	..	1,416	..	..	..	..	..	..	25,894
Tinnevelly ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8,426
Total ..	..	30	..	..	3 12 0	15	578	4,539	..	..	1,431	..	..	..	..	..	..	1,20,897

Note for Fifth Circle—cont.

(*a*) Permission granted for free grazing of 30 bulls and cows within the Yelumalayan coil enclosure—(South Coimbatore district).

(*b*) One-fourth fee for renewal of lost permit, i.e., As. 2 a permit.

Note.—(1) Full or nominal rate for Kollegal, North and South Coimbatore and for all ranges in Tinnevelly except Srivaikuntam at Re. 1 per buffaloe, As. 8 per cow or bullock and As. 4 per sheep.

(2) Full or nominal rate at As. 6 per buffaloe, As. 3 per cow or bullock and As. 1-6 per sheep for Srivaikuntam range in Tinnevelly district.

(3) Part of Kodaikanal range at As. 8 for buffaloes, As. 4 for cows and As. 2 for sheep. (Madura district).

(4) Part of Kodaikanal and Palni, Cumbum, Natham and Ayyalur excluding old Vaiyampatti at Re. 1-8-0 for buffaloes, As. 12 for cows and As. 6 for sheep. (Madura district.)

(5) Ayyalur (old Vaiyampatti) Rs. 2 for buffaloes, Re. 1 for cows, As. 8 for sheep. (Madura district).

Return of grazing in the State forests during 1930-31—*cont.*

District	Grazing on payment—Number of animals.										
	At enhanced or special rates.				At full rates.					At privileged rates.	
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals. (Cow calves).	Fees received.	Buffaloes.	Cows and bullocks.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
SIXTH CIRCLE.				RS.					RS.		
Reserved Forests.											
Mangalore, North	..	..	..	..	1,285	11,976	..	..	5,294	..	..
Mangalore, South	..	(*a*) 15,599	..	1,950	2,491	17,619	..	..	8,164	..	..
Wynaad ..	..	..	..	..	2,084	3,627	..	..	3,898	..	..
Nilambur ..	(*b*) ..	..	..	..	..	..	..	..	..	..	..
The Nilgiris	15	303	..	167	6,960	13,449	1,883	19	5,310	..	..
	..	(*c*) 7,000	31,150	169	..	..	..	..	..	..	..
Palghat	12	1,352	49	1,400	10	4,942	1,869	..	2,948	..	..
Total ..	27	24,254	31,199	3,686	12,630	51,613	3,752	19	25,614	..	..
Reserved Lands.											
The Nilgiris ..	..	..	..	..	..	..	..	..	..	..	..

(*a*) Includes buffaloes.

(*b*) No grazing allowed.

(*c*) Slaughter cattle.

Per each head of

	Buffalo			Cow and bullocks.			Sheep.		
Full rates—	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
North and South Mangalore	0	10	0	0	6	0	..		
Wynaad and Palghat	1	0	0	0	8	0	0	4	0
The Nilgiris	0	6	0	0	3	0	0	1	6

Enhanced rates—

South Mangalore—Cattle admitted to Kulgunda cattle fair at As. 2 each.

The Nilgiris .. Buffaloe, Re. 1. Cow, As. 8.

The Nilgiris slaughter cattle. Cow, As. 3 per 50 per day; sheep, As. 1½ per 50 per day.

Palghat .. Buffaloe, Rs. 2 each. Cow, Re. 1 each. Sheep, As. 8 each.

Return of grazing in the State forests during 1930–31—*cont.*

District.	Grazing on payment—Number of animals—*cont.*				Grazing free—Number of animals.											
	At privileged rates—*cont.*				By right under settlement.					During pleasure of Government or otherwise than under settlement.					Total value of fees at full rates.	Grand total of value at full rates.
	Goats and sheep.	Other animals.	Fees received.		Buffaloes	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks	Goats and sheep.	Other animals.	Value of fees at full rates.		
			Actual.	Value at full rates.												
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
SIXTH CIRCLE —*cont.*															Rs.	Rs.
Reserved Forests —cont.																
Mangalore, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5,294
Mangalore, South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10,114
Wynaad ..	..	..	..	..	..	..	..	..	..	15	95	..	..	..	62	3,960
Nilambur ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
The Nilgiris.	..	..	..	..	..	..	..	..	..	155	117	..	..	..	80	5,726
Palghat	..	..	..	..	..	..	..	..	..	..	77	..	..	..	39	4,387
Total ..	..	..	..	..	..	..	..	..	..	170	289	..	..	..	181	29,481
Reserved Lands.																
The Nilgiris ..	..	..	..	..	..	..	..	..	..	938	252	..	..	..	399	399

Return of grazing in the State forests during 1930-31.

District.	Grazing on payment—Number of animals.											
	At enhanced or special rates.					At full rates.					At privileged rates.	
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
					Rs.					Rs. A.		
Parlakimedi Maliahs ..	..	..	..	..	..	2,335	2,933	320	..	1,455 9	..	..
Total, Departmental areas, Reserves ..	7,651	44,053	31,342	..	25,531	59,746	793,496	449,004	21	5,35,861 0	11,371	102,240
Unreserved lands ..	6,806	5,555	..	..	7,188	2,335	2,933	330	..	1,456 0	..	..
Grand Total ..	14,457	49,608	31,342	..	32,719	62,081	796,429	449,324	21	5,37,317 0	11,371	102,240
Total, Panchayat areas	3,425	53,086	43,967	..	54,584	16,228	222,581	479,311	..	2,55,522 0	5,988	112,732
Grand Total, Presidency.	17,882	102,694	75,309	..	87,303	78,309	1,019,010	928,635	21	7,92,839 0	17,359	114,972

Return of grazing in the State forests during 1930-31—*cont.*

District.	Grazing on payment—Number of animals—*cont.*				Grazing free—Number of animals.											
	* At privileged rates—*cont.*				By right under settlement					During pleasure of Government or otherwise than under settlement.						
	Goats and sheep.	Other animals.	Fees received.		Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.
			Actual.	Value at full rates.												
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
			RS.	RS.					RS.					RS.	RS.	RS. A. P.
Parlakimedi Maliahs.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,455 9 0 or Rs. 1,456
Total, Departmental areas, Reserves ..	15,797	23	17,971	41,164	1,310	7,666	3,315	..	5,467	6,691	65,754	209	..	14,880	19,037	6,21,938 0 0
Unreserved lands.	..	..	..	..	..	..	..	..	..	938	252	..	..	..	399	9,043 0 0
Grand Total ..	15,797	23	17,971	41,164	1,310	7,666	3,315	..	5,407	7,629	66,006	209	..	14,880	19,436	6,30,981 0 0
Total, Panchayat areas.	58,463	..	14,272	17,077	13	1,009	657	..	767	120	405	..	..	121	..	3,32,814 0 0
Grand Total, Presidency.	74,260	23	32,243	58,241	1,323	8,675	3,972	..	6,174	7,749	66,411	209	..	15,001	19,436	9,62,795 0 0

* Genuine inhabitants of the Agency except professional graziers are permitted to graze cattle free of charge and without licence on permit.

	A.	P.	
Buffaloes at	6	0	per head.
Cows at	3	0	,,
Sheep at	1	6	,,

Note.—Grazing on payment at enhanced or special rates is nil.

Abstract of animals permitted to graze on payment in Reserved Forests and Reserved Lands.

Circle.	Buffaloes.	Bullocks and cows.	Sheep.	Other animals.	Total.
First Circle ..	35,612	205,434	78,235	..	319,281
Second ,, ..	21,641	153,373	220,423	..	395,337
Fourth ,, ..	7,375	321,131	116,799	23	445,328
Fifth ,, ..	8,389	188,858	45,385	1	242,633
Sixth ,, ..	12,657	75,886	34,951	..	123,494
Parlakimedi Mahals.	2,335	2,983	320	..	5,688
Total, Departmental areas	87,909	947,675	496,113	24	1,531,661
Panchayat areas ..	25,641	288,399	581,741	..	895,781
Grand Total ..	113,550	1,236,014	1,077,854	..	2,427,442

ANNUAL FORM No. 34-A.

Progress in afforestation and regeneration under working plans or schemes during the year 1930-31.

ANNUAL

Forest Department,

Progress in afforestation and regeneration under Working

Division. (1)	Working circle and block. (2)	Period. (3)	Area to be regenerated during period. (4)	Method of treatment. (5)	Area on which regeneration was in progress at commencement of year (1st April 1930). (6)
FIRST CIRCLE.		YEARS	ACS.		ACS.
Ganjam	Plain Sal Timber Working Circle.	1919-20 to 1933-34	2,506	Clear felling and regeneration.	..
	Ravine Working Circle.	1920-21 to 1939-40	2,605	Do.	..
Vizagapatam	Sal Working Circle.	1927-28 to 1961-62	681	Do.	..
Godavari Lower	Casuarina Plantation, Kandikuppa Reserve Forest.	1924-25 to 1933-34	682	Planting up with seedlings, 7'×7'.	64
Nellore	Casuarina Working Circle, Sriharikota Range.	1929-30 to 1938-39	500	Do.	52
	Total ..	..	6,974	..	116
SECOND CIRCLE.					
Anantapur Division.					
Bukkapatnam Range.					
1. Amagondapalyam Reserve.	Compartments 1 and 2.	1905-06 to 1913-14	..	Sowing in patches of 1' square.	..
2. Amagondapalyam Reserve.	Do. ..	1919-20 to 1927-28	..	Dibbling in bushes.	..
Madanapalle Range.					
3. Horsleykonda Extension (A).	....	1925-26 and 1927-28	..	Dibbling in bushes.	..
4. Horsleykonda Extension (B).	....	1924-25 to 1927-28	..	Do.	..
5. Horsleykonda Extension, main.	....	1921-22	..	Do.	..
....	....	1922-23 to 1927-28	..	Do.	..
6. Avulakonda	....	1921-22	..	Do.	..
....	....	1922-23 to 1927-28	..	Do.	..

FORM No. 34-A.

Madras Presidency.

Plans or schemes during the year 1930-31.

Area on which regeneration commenced during the year, 1st April 1930 to 31st March 1931.	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year, 31st March 1931.	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year, 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
201	1,923	201	2,124	..	764	1,269	8,029	11,850	..	..
..										
115	594	114	708	..	498	322	4,738	3,699	..	..
18	(*a*) 92	5	97	13	10	92	32	168	..	..
64	334·8	74	408·8	54	1,279	556	10,332	1,566	380	3,361
50	..	102	102	..	1,216	494	(*b*)2,074	(*b*) 493	..	..
448	(*a*) 2,943·8	496	3,439·8	67	3,767	2,733	25,205	7,776	380	3,361
..	510	..	510	..	..	..	..	..	..	..
..	19·50	..	19·50	..	..	..	263	282	..	..
..	0·40	..	0·40	..	..	..	..	..	..	..
..	0·70	..	0·70	..	..	..	..	..	..	..
..	6·00	..	6·00	..	..	..	272	285	..	..
..	5·80	..	5·80	..	..	..	..	..	..	..
..	2·00	..	2·00	..	..	..	139	..	..	..
..	7·50	..	7·50	..	..	..	..	..	..	..

(*a*) Correct area (*b*) The correct amount.

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Progress in afforestation and regeneration under Working

Division. (1)	Working circle and block. (2)	Period. (3)	Area to be regenerated during the period. (4)	Method of treatment. (5)	Area on which regeneration was in progress at commencement of year (1st April 1930). (6)
SECOND CIRCLE—*cont.*		YEARS.	ACS.		ACS.
Anantapur Division—cont.					
Madanapalle Range—*cont.*					
7. Pentsupad	..	1921-22 to 1927-28	..	Dibbling in bushes.	..
8. Tavalam Reserved Forest.	..	1921-22	..	Do.	..
		1925-26	..	Do.	..
Hospet Range.					
9. Savapuram Reserved Forest.	..	1927-28	..	Do.	..
10. Bukkapatnam range ..	12 beats	1928-29.	12	Dibbling seeds.	12
11. Madanapalle range.	17 beats	Do.	17	Do.	15
12. Hospet range	9 beats	Do.	9	Do.	9
13. Ganganapalle range.	8 beats	Do.	8	Do.	8
14. Vempalli range ..	11 beats	Do.	11	Do.	11
Bukkapatnam Range.					
15. Amagondapalem (E).	Beat	1929-30 to 1938-39	10	Do.	1
16. Amagondapalem (West).	Do.	Do.	10	Do.	1
17. Gangireddipalle beat.	..	Do.	10	Do.	1
18. Kondakamerla beat ..	..	Do.	10	Do.	1
19. Bukkapatnam beat ..	..	Do.	10	Do.	1
20. Narasampalli beat ..	..	Do.	10	Do.	1
21. Erlampalli beat ..	..	Do.	10	Do.	1
22. Nallamadda beat ..	..	Do.	10	Do.	1
23. Mylasamudram beat..	..	Do.	10	Do.	1
24. Ganginepalli beat ..	..	Do.	10	Do.	1
25. Darsimala beat ..	..	Do.	10	Do.	1
26. Jannanulapalli beat ..	..	Do.	10	Do.	1
Madanapalle Range.					
27. Tavalam beat ..	..	Do.	10	Do.	1
28. Chalimamidi beat ..	..	Do.	10	Do.	1
29. Pensupad beat ..	..	Do.	10	Do.	1
30. Arimanipenta beat ..	..	Do.	10	Do.	1
31. Kandlamadugu beat..	..	Do.	10	Do.	1
32. Horsleykonda plateau.	..	Do.	10	Do.	1
33. Do. Bungalow beat.	..	Do.	10	Do.	..
34. Chigulabailu beat ..	..	Do.	10	Do.	1
35. Tittu beat	..	Do.	10	Do.	1

Plans or schemes during the year 1930-31—*cont.*

Area on which regeneration commenced during the year 1st April 1930 to 31st March 1931.	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year 31st March 1931.	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.		ACS.	ACS.			RS.			
..	4·10	..	4·10	..	..	..	..	..	..	..
..	2·00	..	2·00	..	..	..	..	..	..	..
..	0·30	..	0·30	..	..	..	..	..	..	..
..	1·00	..	1·00	..	..	..	24	..	..	..
..	..	..	..	12	..	..	..	..	..	..
..	..	..	..	15	..	..	..	..	..	..
..	..	..	..	9	..	..	..	..	..	..
..	..	..	..	8	..	..	13	..	..	..
..	..	..	..	11	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was in progress at commencement of year, 1st April 1930.
(1)	(2)	(3)	(4)	(5)	(6)
SECOND CIRCLE—*cont.*					
Anantapur Division—cont.		YEARS.	ACS.		ACS.
Madanapalle Range—*cont.*					
36. Chamalagondi beat ..	..	1929-30 to 1938-39	10	Dibbling seeds.	1
37. Edurudona beat ..	..	Do.	10	Do.	1
38. Kokkanti beat ..	..	Do.	10	Do.	1
39. Thummala South beat.	..	Do.	10	Do.	1
40. Thummala North beat.	..	Do.	10	Do.	1
41. Kuntlapalli beat ..	..	Do.	10	Do.	1
42. Kalasamudram beat ..	..	Do.	10	Do.	1
43. Kurli beat	..	Do.	10	Do.	1
Hospet Range.					
44. Moka beat	..	Do.	10	Do.	1
45. Chilakerahetti beat ..	..	Do.	10	Do.	1
46. Kallahalli beat ..	..	Do.	10	Do.	1
47. Bandri beat	..	Do.	10	Do.	1
48. Gunda beat	..	Do.	10	Do.	1
49. Sivapuram beat ..	..	Do.	10	Do.	1
50. Somalapuram beat ..	..	Do.	10	Do.	1
51. Banavasi beat	..	Do.	10	Do.	1
52. Kupgal beat	..	Do.	10	Do.	1
Ganganapalli Range.					
53. Gondipalli beat ..	..	Do.	10	Do.	1
54. Nandimandalam beat.	..	Do.	10	Do.	1
55. Ellatur beat	..	Do.	10	Do.	1
56. Gollapalli beat ..	..	Do.	10	Do.	1
57. Jamalpalli beat ..	..	Do.	10	Do.	1
58. Ganganapalli beat ..	..	Do.	10	Do.	1
59. Maddimadugu beat ..	..	Do	10	Do.	1
60. Cherlopalli beat ..	..	Do.	10	Do.	1
Vempalli Range.					
61. Palyam Gollapalli beat.	..	Do.	10	Do.	1
62. Dinnupadu beat ..	..	Do.	10	Do.	1
63. Vempalle beat ..	..	Do.	10	Do.	1
64. Elamananpalle beat ..	..	Do.	10	Do.	1

Plans or schemes during the year 1930–31—*cont.*

Area on which regeneration commenced during the year 1st April 1930 to 31st March 1931.	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year 31st March 1931.	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.				ACS.						
1	..	..	..	2	..	..	..	..	..	..

Progress in afforestation and regeneration under Working

Division. (1)	Working circle and block. (2)	Period. (3)	Area to be regenerated during the period. (4)	Method of treatment. (5)	Area on which regeneration was in progress at commencement of year 1st April 1930. (6)
SECOND CIRCLE—*cont.*		YEARS.	ACS.		ACS.
Anantapur division—cont.					
Vampalli Range—*cont.*					
65. Komarkalva beat ..	....	1929-30 to 1938-39	10	Dibbling seeds.	1
66. Rachakuntapalli beat.	....	Do. ..	10	Do. ..	1
67. Gunnala cheruvu beat	....	Do. ..	10	Do. ..	1
68. Talpula beat	....	Do. ..	10	Do. ..	1
69. Idupulapaya North beat.	....	Do. ..	10	Do. ..	1
70. Idupulapaya South beat.	....	Do. ..	10	Do. ..	1
71. Chilkampalli beat ..	....	Do. ..	10	Do. ..	1
Total ..	....	..	627	..	111
Kurnool East division.					
1. Maddipenta felling series.	Coppice with standards working circle.	40 from 1928-29.	1,265	Clear-felling and artificial regeneration by broadcast sowing on burnt debris.	107
2. Mogulutla felling series,	Do.	Do ..	2,278	Do.	189
3. Thummalabailu felling series.	Do.	Do. ..	2,266	Do.	95
Dornal Range.					
4. Nine beats and 5 sections.	Sandal propagation working circle.	10 from 1928-29.	140	Dibbling seeds in patches amidst bushes or nurseries along streams at six seeds per patch by subordinates free of cost.	28
Turimella Range.					
5. Ten beats and 3 sections.	Do.	Do. ..	130	Do.	26
6. Ganjivaripalli range. (five beats and 2 sections).	Do.	Do. ..	70	Do.	14

Plans or schemes during the year 1930-31—*cont.*

Area on which regeneration commenced during the year 1st April 1930 to 31st March 1931.	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year 31st March 1931.	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.		ACS.	ACS.	RS.	RS.	RS.	RS.		
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
1	..	..	..	2	..	..	..	..	..	..
56	559·30	..	559·30	167	..	..	711	567	..	..
17	..	..	..	124	24	20	24	30	..	..
..	..	..	..	189	..	34	54	95	..	..
..	..	..	..	95	..	20	29	49	..	..
14	..	..	..	42	..	..	..	..	..	..
13	..	..	..	39	..	..	..	..	..	..
7	..	..	..	21	..	..	..	..	..	..

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was in progress at commencement of year 1st April 1930.
(1)	(2)	(3)	(4)	(5)	(6)
SECOND CIRCLE—*cont.*		YEARS.	ACS.		ACS.
Kurnool East division —cont.					
(7) Markapur Range (seven).					
Beats and 1 section ..	Sandal propagation working circle.	10 from 1928-29.	80	Dibbling seeds in patches amidst bushes or nurseries along streams at six seeds per patch by subordinates free of cost.	11
(8) Erragondapalem Range six beats	Do.	Do.	60	Do.	12
	Total ..	..	6,289	..	482
Kurnool West division.					
	Old Veldurthi working circle new babul working circle.	10 years ..	15	Cultural operation and sowing of palmyra reeds in ¼ acre.	..
	Gundlabrahmeswaram old working plan sanctioned in B.P.F. No. 132, dated 24th July 1912.	Do.	10	Stump planting with teak and nallamaddi seeds in blocks over 15 chains.	9·50
	Old Pecheruvu working plan sanctioned in C. C. P. No. 308, Mis., dated 8th December 1925	5 ..	Tending in sandal coupes.	Tending operations.	55·00
	..	..	..	Dibbling sandal seeds.	231·00
Under New Nallamalais : Working Plan pending sanction.					
Gundlabrahmeswaram range.	High forest working circle, Gundlabrahmeswaram series.	10 years ..	10	Clear-felling and artificial regeneration	..

Plans or schemes during the year 1930-31—*cont.*

Area on which regeneration commenced during the year, 1st April 1930 to 31st March 1931.	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year 31st March 1931.	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year, 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.		ACS.	ACS.	RS.	RS.	RS.	RS.		
12	..	..	..	23	..	..	..	..	..	..
6	..	..	..	18	..	..	..	..	..	..
69	..	..	..	551	24	74	107	174	..	..
...	17·50	..	17·50	..	..	..	81	191	..	..
..	0·60	..	0·60	9·50	..	..	..	242	..	..
..	..	..	..	55·00	..	..	..	25	..	..
..	6·00	..	6·00	231·00	14	..	153	40	..	..
15·00	..	..	..	15·00	..	202	..	202	..	..

Progress in afforestation and regeneration under Working

Division. (1)	Working circle and block. (2)	Period. (3)	Area to be regenerated during the period. (4)	Method of treatment. (5)	Area on which regeneration was in progress at commencement of year 1st April 1930. (6)
SECOND CIRCLE—*cont.*		YEARS.	ACS.		ACS.
SANDALWOOD PROPAGATION CENTRES.					
Nandyal Range	Ramanapenta series.	10	10	Clear felling and artificial regeneration.	..
Pechiruvu Range	Pole coupe I of 1929-30.	Do.	..	Dibbling seeds in debris burnt patches	..
Gundlabrahmeswaram Range.	Pole Working circle, Pole coupe of Sudem, Pangidi and Rudracode.	Do.	..	Staking seedlings in pole coupes.	99
	Do.	..	..	Cutting useless species for purpose of artificial regeneration.	..
	Pole Working circle, Pole coupe of Pangidi series.	..	..	Heaping up burning debris.	..
Bairluty Range	Pole Working circle, Pole coupe of Bairluty, Nagaluty and Pasucutta series.	..	..	Clearing the bamboo regrowth, burning the useless stuff, sowing seeds in burnt patches and staking the seedlings.	289
Total ..		..	45	..	683·50
North Cuddapah division.					
Sidhout Range.					
Sandal sowing in six beats.	Sandal Working circle, sanctioned in Chief Conservator's Proceedings No. 274, Press, dated 1st August 1928.	1928-29 to 1938-39.	30	Dibbling of sandal seeds shall be done in thorny bushes and under growth in 100 patches in each plot of ½ acre.	4·00
Badvel Range.					
Sandal sowing in eight beats.		Do.	40		7·75
Porumamilla Range.					
Sandal sowings in ten beats.		Do.	50		6·50
Vonipenta Range.					
Sandal sowings in twelve beats		Do.	60		8·50
Vontimitta Range.					
Sandal sowings in ten beats.		Do.	50		8·19

Plans or schemes during the year 1930-31—*cont.*

Area on which regeneration commenced during the year 1st April 1930 to 31st March 1931.	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1931).	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During the year 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.		ACS.	ACS.	RS.	RS.	RS.	RS.		
15·00	..	..	..	15·00	..	191	..	191	..	..
26·00	..	..	..	26·00	..	13	..	13	..	..
101	..	..	..	200	..	24	..	24	..	..
..	..	..	..	..	..	73	..	332	..	..
..	..	..	..	..	..	..	..	12	..	..
..	..	..	..	289	..	..	..	638	..	..
157·00	24·10	..	24·10	840·50	14	503	234	1,910	..	..
3·00	..	..	..	7·00	..	..	..	..	..	..
4·00	..	..	..	11·75	..	..	..	..	..	..
5·00	..	..	..	11·50	..	..	..	..	..	..
6·00	..	..	..	14·50	..	..	..	..	..	..
5·00	..	..	..	13·19	..	..	..	..	..	..

Progress on afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area in which regeneration was in progress at commencement of year (1st April 1930).
(1)	(2)	(3)	(4)	(5)	(6)
SECOND CIRCLE —*cont.*					
SANDALWOOD PROPAGATION CENTRES—*cont.*			ACS.		ACS.
North Cuddapah division —cont.					
Vontimitta Range—*cont.*					
Vanesvaram sandal plot ..	These plots were existing before the sanction of Working current Plan.	..	..	..	0·62
Rollabodu sandal plot ..		..	..	..	0·81
Kothabhavi sandal plot ..		..	..	..	35·00
Thurthalu sandal plot ..		..	..	..	0·50
Byreni sandal plot ..		..	..	..	0·50
Chinnaletipatibhavi sandal plot.		..	..	..	0·50
Mamilleru sandal plot ..		..	..	..	0·50
Idamadaka sandal plot ..		..	..	..	0·50
Dasarladoddi sandal plot.		..	..	..	20·00
Artificial regeneration in timber improvement coupes of all ranges.	Timber improvement working circle.	1928-29 to 1938-39.	..	Early burning, cutting back seedlings, dumping and burning debris and sowing seeds on ash.	1,041·00
Artificial regeneration in fuel coupes of all ranges.	Fuel working circle.	Do.	..	Early burning, dumping and burning of debris and sowing of seeds on ash.	..
	Total ..	..	230·00	..	1,134·87
South Cuddapah division.					
Rajampet Range.					
Rajampet improvement felling series.	Coupe V of Rajampet Improvement Felling Series.	1920-21	..	Dibbling sandal seeds.	3·00
Rajampet old fuel series ..	Coupe III.. ..	1930-31	0·50	Do.	..

(*a*) The expenditure noted in column (13) represents cost incurred for early

Plans or schemes during the year 1930-31—*cont.*

Area on which regeneration commenced during the year, 1st April 1930 to 31st March 1931.	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year, 31st March 1931.	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year, 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.		RS.	RS.	RS.		
..	0·62	..	0·62	..	..	5	..	65	..	..
..	0·81	..	0·81	..	..	5	..	53	..	..
..	35 00	..	35·00	..	..	..	9	..	..	..
..	0·50	..	0·50	..	..	..	5	..	..	..
..	0·50	..	0·50	..	..	..	4	..	..	..
..	0·50	..	0·50	..	..	..	9	..	.	..
..	0·50	..	0·50	..	..	..	5	..	..	..
..	0·50	..	0·50	..	..	..	4	..	..	..
..	20·00	..	20·00	..	..	..	..	..	..	..
1,576·00	..	..	..	2,617·00	..	(*a*) 880	..	(*a*) 880	..	..
1,937·00	..	..	..	1,937·00	..	(*a*) 152	..	152	..	..
3,536·00	58·93	..	58·93	4,611·94	..	1,042	36	1,150	..	..
..	3·00	..	3·00	..	..	..	4	..	..	..
0·50	..	0·50	0·50	..	Done free of cost by subordinates.					

burning coupes, cutting back seedlings, dumping of debris and sowing seeds.

Progress in afforestation and regeneration under Working

Division. (1)	Working circle and block. (2)	Period. (3)	Area to be regenerated during the period. (4)	Method of treatment. (5)	Area in which regeneration was in progress at commencement of year (1st April 1930.) (6)
SECOND CIRCLE—*cont.*		YEARS.	ACS.		ACS.
SANDALWOOD PROPAGATION CENTRES—*cont.*					
South Cuddapah Division—cont.					
Kodur Range.					
Gadithalapenta Fuel Series.	Coupe VI	1921-22	..	Dibbling sandal seeds.	0·50
Do. ..	Coupe XVIII ..	Do.	..	Do.	0·50
Do. ..	Coupe X near Thottamarappaguntа.	Do.	..	Do.	1·00
Do. ..	Coupe XIII near 8th mile.	Do.	..	Do.	1·00
Kodivengambhavi, North beat.	Kodivengambhavi North Improvement Felling Series.	1930-31	0·50	Do.	..
Kodivengambhavi, South beat.	Kodivengambhavi South Improvement Felling Series.	Do.	0·50	Do.	..
Madlobhavi beat (Near Pottetikunta).	Gadela Improvement Felling Series.	Do.	0·50	Do.	..
Gadela beat (Near Nallagattavani kunta.)	Gotlakonda Fuel Series.	Do.	0·50	Do.	..
Balapalli Range.					
Balapalli West Fuel Series.	Coupes II and VII.	1920-21 and 1922	..	Dibbling sandal seeds.	10·00
Thunukonda Fuel Series.	Coupes IV and VII.	1921-22	..	Do. ..	10·00
Chitvel Range.					
Kodur East Fuel Series ..	Coupe XIII ..	1919-20	..	Dibbling sandal seeds.	4·00
Do. ..	Do. ..	1930-31	0·50	Do. ..	..
Total ..	..	..	3·00	..	30·00
Grand total ..	..	..	7,194	..	2,441·37

Plans or schemes during the year 1930-31—*cont.*

Area on which regeneration commenced during the year, 1st April 1930 to 31st March 1931.	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year 31st March 1931.	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.		
..	0·50	..	0·50	..	..	..	10	..	..	..
..	0·50	..	0·50	..	..	..	10	..	..	..
..	1·00	..	1·00	..	..	..	..	..	..	..
..	1·00	..	1·00	..	..	..	5	..	..	..
0·50	..	0·50	0·50	..	..	Done free of cost by subordinates.				
0·50	..	0·50	0·50	..	..					
0·50	..	0·50	0·50	..	..					
0·50	..	0·50	0·50	..	..					
..	10·00	..	10·00	..	..	..	4	..	..	..
..	10·00	..	10·00	..	..	..	10	..	..	..
..	4·00	..	4·00	..	..	..	6	..	..	..
0·50	..	0·50	0·50	..	..	Done free of cost by subordinates.				
3·00	30·00	3·00	33·00	..	..	..	49	..	..	..
3,821·00	672·33	3·00	675·33	6,170·44	38	1,619	1,137	3,801	..	..

Progress in afforestation and regeneration under Working

Division	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was in progress at commencement of year (1st April 1930).
(1)	(2)	(3)	(4)	(5)	(6)
FOURTH CIRCLE.		YEARS.	ACS.		ACS.
Chittoor.					
	Sandal Regeneration Working Circle—All compartments.	1st April 1929 to 31st March 1931.	102	Sandal seeds to be dibbled.	204
	Timber Regeneration Working Circle—Compartment III of each of the four Regeneration series.	Do.	2,428	Early burning, cutting back seedlings early burnt, cutting creepers and sowing seeds in blank areas.	643
Total ..			2,530	..	847
Vellore.					
	Virinchipuram Working Circle.	1888-89 to 1930-31.	Blanks in felled coupes.	Dibbling of seeds of timber species.	..
	Chenur Working Circle.	Do.	Do.	Do.	..
	Kilminnal Working Circle.	Do.	Do.	Do.	..
	Tiruvallam Working Circle.	Do.	Do.	Do.	..
Total ..	..	..	..	..	..
Central Salem.					
	Kurumbapatti Palmyra tope.	16 years from 1926-27.	379	Sowing palmyra seeds.	..
	Shevroys Central Working Circle.	Four years.	321	Planting silver oak and cyprus and sowing seeds of Australian wattle.	..
	Sanniyasimalai Working Circle.	One year.	4	Planting Acacia Decurrens and blue gum.	..

Plans or schemes during the year 1930-31—*cont.*

Area on which regeneration commenced during the year 1st April 1930 to 31st March 1931.	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1931).	Expenditure during year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of operation.
	Previous.	During the year 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
102	..	..	..	306	..	..	..	..	..	..
9·1	..	..	..	652·1	651	..	1,007	..	..	..
111·1	..	..	..	958·1	651	..	1,007	..	..	..
..	283	..	283	..	..	545	9,552	57,686	1,695	46,762
..	142	..	142	..	..	(*a*) 493	4,623	4,910	73	7,673
..	104	..	104	..	..	(*a*) 338 (*b*) 14	3,157	27,397	4,380	34,953
..	111	..	111	..	..	(*a*) 826 (*b*) 16	7,319	62,067	523	37,177
..	640	..	640	..	..	2,232	24,651	1,52,060	6,671	1,26,565
32	75	32	107	..	130	..	442	..	314	1,042
..	143	..	143	..	..	..	..	9,096	..	..
..	4	..	4	..	..	..	108	..	..	..

(*a*) Cost of establishment.
(*b*) Cost of collection of Korukapuli seeds and Divi Divi pods.

Progress in afforestation and regeneration under Working

Division. (1)	Working circle and block. (2)	Period. (3)	Area to be regenerated during the period. (4)	Method of treatment. (5)	Area on which regeneration was in progress at commencement of year (1st April 1930). (6)
FOURTH CIRCLE—*cont.*		YEARS.	ACS.		ACS.
Central Salem—cont.					
....	Jalluthu Working Circle.	1927-28.	114	1. Felling of fuel coupes under simple coppice.	
			..	2. Sowing of seeds of indigenous species in blank areas.	
Total ..			818	..	..
Grand Total ..			3,348	..	847
FIFTH CIRCLE.					
SOUTH COIMBATORE.					
Regeneration area ..	Mount Stuart Working Circle.	1919 ..	..	Clearing, burning and dibbling teak and other seeds.	..
		1920 ..	..		..
		1921 ..	..		..
		1922 ..	..		..
		1923 ..	..		..
		1924 ..	..		..
		1925 ..	..		..
		1926 ..	..		..
		1927 ..	..		..
		1928 ..	..		..
		1929 ..	..		..
		1930 ..	..		(a) 224
		1931 ..	103		..
Waterfall Plantation ..	....	..	..	..	..
Experimental Plantation at Mount Stuart.	....	1916 ..	..	..	..
Experimental Plantation at Karian Shola.	....	..	..	..	..
Experimental Plantation at Topslip.	....	..	..	..	..
Planting Eucalyptus seedlings from nursery pits round Topslip.	....	..	..	..	..
Undersowing Artocarpus Hirsuta.	....	..	..	..	..

(a) The District Forest Officer reports that the correct area is 224 acres and not 202 noted last year.

Plans or schemes during the year 1930-31—*cont.*

Area on which regeneration commenced during the year 1st April 1930 to 31st March 1931. (7)	Area in which regeneration is complete. Previous. (8)	During the year 1st April 1930 to 31st March 1931. (9)	Total to 31st March 1931. (10)	Area on which regeneration is still in progress at close of year (31st March 1931). (11)	Expenditure during year. Creation. (12)	Upkeep. (13)	Expenditure from commencement of period. Creation. (14)	Upkeep. (15)	Revenue during the year. (16)	Total revenue from date of creation. (17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
..	114	..	114	..	..	..	..	..	..	..
32	336	32	368	..	130	..	550	9,096	314	1,042
143·1	976	32	1,008	958·1	781	2,232	26,208	1,61,156	6,985	1,27,607
..	29	..	29	..	..	24	643	826	..	..
..	8	..	8	..	..	..	584	576	Abandoned.	
..	29	..	29	..	..	24	545	1,267	..	..
..	126	..	126	..	..	12	3,358	4,303	..	..
..	194	..	194	..	..	46	5,055	5,729	..	..
..	226	..	226	..	..	69	6,459	4,883	..	..
..	260	..	260	..	..	146	9,986	6,531	..	..
..	251	..	251	..	..	60	15,251	1,798	..	..
..	155	..	155	..	..	88	5,405	5,231	..	..
..	144	..	144	..	..	404	4,124	4,050	..	..
..	151	..	151	..	..	1,037	4,133	4,032	..	..
..	..	224	224	..	1,382	5,193	5,242	5,193	..	..
(*b*) 103	..	..	..	103	3,249	..	3,249	..	..	..
..	12	..	12	..	..	..	..	..	..	..
..	5	..	5	..	..	..	..	78	..	..
..	1	..	1	..	..	81	..	93	..	..
..	10	..	10	..	..	..	31	..	..	..
..	..	..	..	..	..	..	57	..	..	..
..	..	..	..	..	..	..	22	..	..	..

(*b*) Includes 6 acres under control of the Forest Research Officer.

Progress in afforestation and regeneration under Working

Division. (1)	Working circle and block. (2)	Period. (3)	Area to be regenerated during period. (4)	Method of treatment. (5)	Area on which regeneration was in progress at commencement of year (1st April 1930). (6)
FIFTH CIRCLE—*cont.*		YEARS.	ACS.		ACS.
SOUTH COIMBATORE—*cont.*					
Formation of Hopea nurseries.	..	..	..	..	..
Formation of nurseries and gap regeneration area.	..	..	..	..	..
Regeneration plots in compartment IX and X.	Punachi Working Circle.	..	..	..	..
Two-acre plot in compartment II.		..	..	..	..
Three-acre plot in compartment XV.		..	..	..	..
Regeneration area in compartment XIV and XVI.		1924	..	..	..
Ten-acre plot in compartment XV.		..	..	..	..
Regeneration area in compartment XII and XIII.		1925	..	..	..
Periodic block I		1925-26	..	..	..
Periodic block		1926-27	..	..	..
Do.		1928	..	..	..
Do.		1929	..	..	..
Do.		1930	..	..	25
Do.		1931	25	..	..
NORTH COIMBATORE.					
Mettupalaiyam range—Mannar Sandalwood Working Circle.	..	..	..	Dibbling sandal seeds.	..
Jaccanarai Sandalwood compartment.	..	..	..	..	..
MADURA.					
Vannathiparai Cumbum Valley experimental scheme.	..	5 years from 1927-28 to 1932-33.	5	Artificial regeneration of teak, rosewood, etc.	..
Total ..	..	..	133	..	249

	RS.
NOTE.—Total expenditure on regeneration	12,306
Add amount relating to 1929-30 adjusted in 1930-31 ..	6,221
Total ..	18,527 (*a*)

(*a*) Excludes Rs. 137 erroneously debited to regeneration and Rs. 336 to be adjusted to Mount Stuart commercial concern.

Plans or schemes during the year 1930–31—*cont.*

Area on which regeneration commenced during the year 1st April 1930 to 31st March 1931.	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year, 31st March 1931.	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During the year 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
..	..	..	..	..	..	..	45	..	..	..
..	..	..	..	..	491	..	491	..	..	..
					5,122	7,184	64,680	44,590		
..	5	..	5	..	..	..	86	128	..	..
..	2	..	2	..	..	99	75	126	..	..
..	3	..	3	..	..	..	146	98	..	..
..	25	..	25	..	..	86	524	1,220	..	..
..	10	..	10	..	..	..	245	404	..	..
..	25	..	25	..	..	..	431	25	..	..
..	25	..	25	..	..	29	327	124	..	..
..	25	..	25	..	..	26	22	183	..	..
..	25	..	25	..	..	20	185	120	..	..
..	25	..	25	..	..	26	160	26	..	..
..	..	25	25	..	86	53	200	53	..	..
25	..	..	..	* 25	169	..	169	..	..	..
					255	339	2,570	2,507		
..	132	..	132	..	..	..	69	75	..	..
..	108	..	108	..	..	..	30	..	..	..
5	18	5	23	..	† 176	142	1,296	142	..	3,753
133	2,029	254	2,283	128	5,553	7,665	68,645	47,314	..	3,753

* Excludes Rs. 340 spent in root wounding rosewood trees in compartments 7, 8 and 9 collection of seeds, experiments in 5 acre sandal plots in compartments 5 and 2 and burning lantana in periodic blocks 1929.

† Excludes Rs. 43 spent on opening nurseries in Surli plateau.

Progress in afforestation and regeneration under Working

Division. (1)	Working circle and block. (2)	Period. (3)	Area to be regenerated during the period. (4)	Method of treatment. (5)	Area in which regeneration was in progress at commencement of year (1st April 1930). (6)
SIXTH CIRCLE.		YEARS.	ACS.		ACS.
Mangalore, North ..	Coupe I, Catechu working series in Baindur and Wandse.	1926-27	375 acres in coupe I, of Baindur and 180 acres in coupe I, of Wandse series.	Fencing and sowing Acacia Sundra (catechu) at stakes 12' × 12' in filled pits 1' × 1' × 10".	120 acres (51 in coupe I Baindur and 69 acres in coupe II, Baindur).
	Coupe II, Catechu working series.	1927-28	580 acres in Baindur coupe II and 785 acres in Wandse coupe II.		75 acres in coupe II, Baindur.
	Coupe III, Catechu working series.	1928-29	550 acres in coupe III Baindur and 1,030 acres in coupe III, Wandse.		13 acres in coupe III Baindur and 76 acres in coupe III, Wandse
	Coupe IV of Wandse working series.	1929-30	1,470 acres in coupe IV of Wandse series.		34 acres in coupe IV of Wandse series.
Total ..	....	..	4,970	..	318
Wynaad	Experimental working circle, Begur and Chedleth ranges.	1892-93 to 1929-30	(a) 1,551	Regular planting and Taungya planting.	..
	Cultural operations in Begur and Chedleth ranges.	..	..	Patch regeneration by dibbling seeds.	..
	Clear-felling working circle in Begur and Chedleth ranges.	1929-30 to 1938-39	(a) 1,500	Concentrated regeneration by stump planting.	152

(a) Total area provided in the Working Plan.

Plans or schemes during the year 1930-31—*cont.*

Area in which regeneration commenced during the year 1st April 1930 to 31st March 1931.	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1931).	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During the year 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
..	..	..	..	120	..	36	352	437	..	..
..	..	..	..	75	..	70	396	406	..	..
..	..	..	..	13	..	25	86	90	..	..
..	..	..	..	76	..	78	440	213	..	..
..	..	..	..	34	..	54	306	54	..	..
..	..	..	..	318	..	263	1,580	1,200	..	..
..	1,395	..	1,395	..	..	6,523	58,386	54,138	491	28,725
..	(*b*) 227	..	227	..	..	..	1,924	160	..	..
135	..	152	152	135	8,859	..	12,892	..	..	..

(*b*) Patch or regeneration done in Begur and Chedleth ranges from 1914-15 to 1921-22 now shown in this return as the patches lie in the area covered by Working Plan.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area in which regeneration was in progress at commencement of year (1st April 1930).
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE—*cont.*		YEARS.	ACS.		ACS.
Wynaad—*cont.* ..	Selection felling working circle felling series I and III, Begur and Chedleth ranges.	1929-30 to 1938-39.	(*a*) 6,924	Patch regeneration by dibbling and stump planting.	576
	Selection felling working circle felling series I.	..	..	Taungya planting.	..
	Improvement felling working circle in Sultan's Battery range.	..	..	Taungya planting and dibbling.	..
			..	Patch planting and dibbling.	..
Total ..	..	..	9,975	..	728
Nilambur	Plantation working circle.	1928-29 to 1937-38.	1,290	Artificial ..	98
	Conversion working circle.	Do.	2,209	Do. ..	186
	Beypore Cocoanut tope.	1930-31	..	Do. ..	..
Total ..	..	..	3,499	..	284
The Nilgiris	Mudumalai clear felling working circle.	1927 to 1937.	300	Artificial regeneration.	20
	Do.	Do.	105 (one acre per 100)	Dibbling sandal seed.	4
	Sandal area, Segur range.	1930-31	25	Do.	..
	Sandalwood area, Coonoor range.	Do.	25	Do.	..
	Nilgiris plantations and Aramby Block V, compartment 178.	Do.	..	Artificial regeneration by planting bluegum.	..
	Baikie Block IV, compartment I.	Do.	..	Do.	..
	Snowdon Block III, compartment2 B.	Do.	..	Do.	..

(*a*) Total area provided in the Working Plan.

Plans or schemes during the year 1930–31—*cont.*

Area on which regeneration commenced during the year (1st April 1930 to 31st March 1931.) (7)	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1931). (11)	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year. (16)	Total revenue from date of creation. (17)
	Previous. (8)	During the year 1st April 1930 to 31st March 1931. (9)	Total to 31st March 1931. (10)		Creation. (12)	Upkeep. (13)	Creation. (14)	Upkeep. (15)		
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
705	..	576	576	705	284	..	481	..	..	..
(*b*) 29	..	29	29	..	125	..	125	..	..	..
(*c*) 1	(*d*) 9	..	10	..	107	..	107	117	..	..
..	(*e*) 2	..	2	..	..	12	67	88	..	..
870	1,633	758	2,391	840	9,375	6,535	73,982	54,503	491	28,725
82	346	93	439	87	4,415	..	16,329	..	..	..
276	266	186	452	276	11,339	..	31,813	..	..	..
..	37	..	37	..	..	2,144	884	16,363	..	..
358	649	279	928	363	16,754	2,144	49,026	16,363	..	..
35	22·5	35	57·5	20	766	..	3,291	286	677	2,976
29	1	5	6	24	153	9	180	9	..	..
25	50	25	75	..	55	..	183	..	..	..
25	50	25	75	..	60	34	235	68	..	..
..	3·7	..	3·7	..	..	..	95	12	..	..
..	1·5	..	1·5	..	..	..	27	..	..	..
..	4·5	..	4·5	..	..	..	4	..	..	..

(*b*) Tuckle planting done at Belgole in Selection felling Working Circle Felling Series 1.
(*c*) Sandal tuckle in Sultan's Battery.
(*d*) Tuckle planting in Sultan's Battery Range.
(*e*) Experimental patch regeneration in Sultan's Battery range of sandalwood and satinwood.

Progress in afforestation and regeneration under Working

Division. (1)	Working circle and block. (2)	Period. (3)	Area to be regenerated during the period. (4)	Method of treatment. (5)	Area in which regeneration was in progress at commencement of year (1st April 1930). (6)
		YEARS.	ACS.		ACS.
SIXTH CIRCLE—*cont.*					
The Nilgiris—*cont.*	Snowdon Block III, compartment 3.	1930-31	..	Artificial regeneraation by planting bluegum.	..
	Brooklands compartment 3.	Do.	..	Artificial regeneration by planting *Eucalyptus eugenoides.*	..
	Springfield compartment 2.	Do.	..	Artificial regeneration with *Eucalyptus eugenoides.*	..
	Springfield compartment 3.	Do.	..	Do.	..
	Springfield compartment 4.	Do.	..	Do.	..
	Springfield compartment 5.	Do.	..	Do.	..
	Coonoor Peak Block II, compartment 2 A.	Do.	..	Artificial regeneration with *Eucalyptus globulus.*	..
	Governorshola Block IV, compartment 4.	Do.	6·4	Do.	..
	Governorshola Block IV, compartment 1.	Do.	10	Do.	..
	Cairnhill Block I, compartment 9(b).	Do.	3	Do.	..
	Marlimund Block III, compartment 1.	Do.	3·7	Do.	..
	Aramby Block VII, compartment 3.	Do.	8	Do.	..
	Brooklands compartment 4.	Do.	5·3	Do.	..
	Coonoor Peak Block II, compartment 2 B.	Do.	3·2	Do.	..
	Tigerhill Reserved Forest.	Do.	12	Do.	..

Plans or schemes during the year 1930-31—*cont.*

Area on which regeneration commenced during the year (1st April 1930 to 31st March 1931).	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1931).	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
..	1	..	1	..	..	..	10	..	..	..
..	5	..	5	..	..	..	211	33	..	..
..	5·2	..	5·2	..	..	10	145	28	..	..
..	5·2	..	5·2	..	..	7	141	23	..	..
..	5·8	..	5·8	..	..	29	120	29	..	..
..	5·8	..	5·8	..	..	30	125	30	..	..
..	3·2	..	3·2	..	..	..	36	..	..	..
..	6·4	..	6·4	..	..	..	52	..	..	..
..	10	..	10	..	..	30	178	30	..	..
..	3	0·4	3·4	..	..	2	45	2	..	..
..	3·7	..	3·7	..	..	6	42	6	..	..
..	3	..	3	..	..	4	46	4	..	..
..	5·3	..	5·3	..	..	237	195	237	..	..
3·2	..	3·2	3·2	..	38	..	38	..	..	..
12	..	12	12	..	167	..	167	..	..	..

Progress in afforestation and regeneration under Working

Division. (1)	Working circle and block. (2)	Period. (3)	Area to be regenerated during the period. (4)	Method of treatment. (5)	Area in which regeneration was in progress at commencement of year (1st April 1930). (6)
SIXTH CIRCLE—*cont.*		YEARS.	ACS.		ACS.
The Nilgiris—*cont.*	Bleakhouse, compartment 1.	1930-31	7·6	Artificial regeneration with *Eucalyptus pillularis.*	..
	Aramby Block VII, compartment 3 (*b*).	1930-31	3	Artificial regeneration with *Eucalyptus Globulus.*	..
	Cairnhill Block I, compartment 9 (*b*) ii.	1930-31	3·5	Do.	..
	Brooklands, compartment 5.	1930-31	5·8	Artificial regeneration with *Eucalyptus pillularis.*	..
Total ..	....	..	521·5	..	24
Palghat	Walayar Forest Pole working circle Block I, compartment 3	1926-27	181	..	..
	Pole working circle, Block II, compartment 8, coupe I.	1927-28	112	..	..
	Pole working circle, Block II, compartment 8, coupe II.	1928-29	125	..	..
	Pole working circle, Block II, compartment 8, coupe III	1929-30	79	..	..
	Pole working circle, Block II, compartment 8, coupe IV.	1930-31	(*g*) 91	.. ..	..
		1931-32	..	..	..
		1932-33	..	..	..
	Bolampatty Forests, Ponam working circle, compartment 17, coupe I.	1926-27	45	..	..

Plans or schemes during the year 1930-31—*cont.*

Area in which regeneration commenced during the year (1st April 1930 to 31st March 1931).	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year, 31st March 1931.	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year, 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
7·6	..	7·6	7·6	..	170	..	170	..	..	..
3	..	3	3	..	33	..	33	..	..	..
3·5	..	3·5	3·5	..	41	..	41	..	..	..
5·8	..	5·8	5 8	..	304	..	304	..	..	..
149·1	195·8	125·5	321·3	44	1,787	398	6,114	797	677	2,976
..	181	..	181	..	..	45	2,245	1,192	..	..
..	112	..	112	..	..	49	1,733	493	..	..
..	125	..	125	..	..	125	1,064	307	..	..
..	79	..	79	..	..	249	1,011	249	..	..
91	..	91	91	..	615	..	1,092	..	..	..
..	..	..	..	..	874	..	1,012	..	..	..
..	..	..	..	..	90	..	90	..	..	..
..	45	..	45	..	..	..	30	118	..	..

Progress in afforestation and regeneration under Working

Division. (1)	Working circle and block. (2)	Period. (3)	Area to be regenerated during the period. (4)	Method of treatment. (5)	Area in which regeneration was in progress at commencement of year (1st April 1930). (6)
SIXTH CIRCLE—*cont.*		YEARS.	ACS.		ACS.
Palghat—*cont.*	Ponam working circle, compartment 16, coupe II.	1927-28	44	Ponam ..	..
	Ponam working circle, compartment 16, coupe III.	1928-29	25	Do. ..	..
	Ponam working circle, compartment 16, coupe IV.	1929-30	28	Do. ..	..
	Ponam working circle, compartment 16, coupe V.	1930-31	28	Do. ..	..
		1931-32	..	..	..
	Mullangadu compartment 27.	1927-28	120	Clearing the area.	..
	Singapathi coupe II.	1928-29	33	Do.	..
	Mullangadu coupe II.	1928-29	31	Do.	..
	Kallar coupe I ..	1928-29	18	Do.	..
	Kallar coupe II ..	1928-29 & 1929-30	31	Do.	..
	Kallar strip II of Singapathi coupe III.	1929-30	13	Do.	..
	Kallar coupe III..	1930-31	28	Do.	..
	Singapathi coupe IV.	1930-31	33	Do.	..
	Mullangadu coupe IV.	1930-31	33	Do.	..
	I strip of Singathy coupe V.	1930-31	16	Do.	..
	I strip of Mullangadu coupe V.	1930-31	16	Do.	..
	I strip of Kallar coupe IV.	1930-31	19	Do.	..
	Sholakarai coupe IV.	1930-31	58	Tending ..	..
Total ..	..	..	1,207	..	..
Grand Total ..	..	..	20,172·5	..	1,354
Grand Total, Presidency.	..	..	37,821	..	5,007

(*a*) Total area provided in the Working Plan.
(*b*) Patch or gap regeneration done in Begur and Chedleth Ranges from 1914-15 to 1921-22 now
(*c*) Tuckle planting done at Belgole in selection felling Working Circle Felling Series I.
(*d*) Sandal tuckle in Sultan's Battery Range.
(*e*) Tuckle planting in Sultan's Battery Range created in 1917 and 1918.
(*f*) Experimental patch regeneration in Sultan's Battery Range of Sandalwood and Satinwood.
(*g*) Excludes 15 acres handed over to the Forest Research Officer.

Plans or schemes during the year 1930-31—*cont.*

Area in which regeneration commenced during the year (1st April 1930 to 31st March 1931).	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year, 31st March 1931.	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year, 1st April 1930 to 31st March 1931.	Total to 31st March 1931.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
..	44	..	44	..	..	..	3	554	..	..
..	25	..	25	..	..	89	112	467	..	..
..	28	..	28	..	..	244	169	244	..	..
28	..	28	28	..	50	..	172	..	..	..
..	..	..	..	..	45	..	44	..	..	..
..	120	..	120	..	..	..	..	180	..	..
..	33	..	33	..	..	..	..	99	..	..
..	31	..	31	..	..	..	..	34	..	..
..	18	..	18	..	..	..	..	50	..	..
..	31	..	31	..	..	..	..	141	..	..
..	13	..	13	..	..	..	..	36	..	..
28	..	28	28	..	..	56	..	56	..	..
33	..	33	33	..	..	66	..	66	..	..
33	..	33	33	..	..	50	..	50	..	..
16	..	16	16	..	..	16	..	16	..	..
16	..	16	16	..	..	16	..	16	..	..
19	..	19	19	..	..	38	..	38	..	..
58	..	58	58	..	..	14	..	14	..	..
322	885	322	1,207	..	1,674	1,057	8,777	4,420	..	..
1,699 1	3,362 8	1,484·5	4,847·3	1,565	28,590	10,397	1,39,479	77,283	1,168	31,701
52·44	9,984	2,219	12,203	8,938	38,729	24,646	2,60,674	2,97,330	8,533	1,66,422

shown in this return as the patches lie in the area covered by working plan.

ANNUAL FORM

Forest Department,

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres.			
		At commencement of year, 1st April 1930.	Added during year, 1st April 1930 to 31st March 1931.	Excluded during year 1st April 1930 to 31st March 1931.	On 31st March 1931.
(1)	(2)	(3)	(4)	(5)	(6)
FIRST CIRCLE.		ACS.	ACS.	ACS.	ACS.
Regular Plantations.					
Guntur	Muthayapalam, 1924-25 ..	5	..	..	5
Nellore	Ulavapad, Casuarina Planting.	162	..	162	..
	Total ..	167	..	162	5
Taungya Operations.					
Godavari, Upper ..	Taungya operations ..	(*a*) 282	29	..	311
Cultural Operations.					
Vizagapatam	Tangedu experimental plot in Arlova reserved forest, 1928-29.	6	6	..	12
	Sal experimental plots in Makava and Polla, 1928-29.	1·5	..	..	1·5
	Sal experimental plots in Chinnagora reserved forest, 1930-31.	..	2·25	..	2·25
Godavari, Upper ..	Clear-felling to establish a better quality of trees and tending, etc.	(*a*)2,089·66	107·8	..	2,197·46
Godavari, Lower ..	Artificial regeneration with teak.	(*a*) 33	16	..	49
Guntur	Muthayapalam, 1912-13 ..	5	..	..	5
	Guttikonda, 1924-25 ..	6	..	..	6
	Venkatayapalem, 1926-27.	3	..	..	3
	Kondapalli, 1927-28 ..	1	..	..	1
	Nachugunta, 1927-28 ..	0·2	..	..	0·2
	Muthukur, 1926-27 ..	..	48	..	48
Nellore	Sreeharikota, 1927-28 ..	5	1·5	5	1·5
	Kambakkam Sandal, 1927-28.	12	0·5	..	12·5
	Udayagiri Durgam Sandal.	6·72	0·25	6·72	0·25
	Total ..	2,169·08	182·30	11·72	2,339·66

(*a*) Correct areas.

No. 34-B.

Madras.

during the year 1930–31.

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during year.	Total revenue from date of creation.
Creation. (7)	Upkeep. (8)	Creation. (9)	Upkeep. (10)	Total. (11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.	Rs.	Acs.	Rs.	Rs.	Rs.	Rs.
..	..	193	9	202	..	..	202	..	9
..	..	1,56,709	17,666	1,74,375	..	..	1,74,375	..	13,011
..	..	1,56,902	17,675	1,74,577	..	..	1,74,577	..	13,020
448	831	2,175	2,093	4,268	..	454	2,996	15	28,235
56	..	88	11	99	..	..	99	..	..
..	..	3	..	3	..	..	3	..	..
19	..	19	..	19	..	..	19	..	..
1,269	1,762	51,936	3,699	55,635	..	..	55,635	2,536	2,83,109
321	109	1,043	571	1,614	..	..	1,614	..	..
..	..	22	..	22	..	..	22	..	..
..	..	..	..	..	..	..	..	..	..
..	..	38	..	38	..	..	38	..	..
..	..	5	..	5	..	..	5	..	..
..	..	11	..	11	..	..	11	..	..
4	..	4	..	4	..	..	4	..	..
10	..	60	..	60	5	..	10	..	..
..	..	103	..	103	..	..	103	..	..
4	..	20	..	20	6·72	..	4	..	..
1,683	1,871	53,342	4,281	57,633	11·72	..	57,607	2,536	2,83,109

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres.			
		At commencement of year, 1st April 1930.	Added during year, 1st April 1930 to 31st March 1931.	Excluded during year, 1st April 1930 to 31st March 1931.	On 31st March 1931.
(1)	(2)	(3)	(4)	(5)	(6)
SECOND CIRCLE.		ACS.	ACS.	ACS.	ACS.
REGULAR PLANTATION.					
Anantapur Division.					
Hospet Range.					
1. Kuppagal Reserved Forest.	Planting Yepi, 1905-06.	520	..	..	520
2. Banavasi Reserved Forest.*	Sowing of Nim, 1905-06.	272	..	..	272
3. Moka Reserved Forest.	Planting of Casuarina with a mixture of Sissoo.	489	..	..	489
Kurnool East Division.					
Kurnool East	Teak, Yegi Nallamaddi and Sandal in Peddachama, Peddamantrala, Chinnamantrala and Maddipenta, 1908.	102	3	34	71
Kurnool South	1923-24	71	..	..	71
Kurnool West	Planting of teak trees, etc., 1905-06.	1,154	..	..	1,154
South Cuddapah Division.					
(Kodur Red Sanders Plantation.)	Planted in 1865 the trees being planted 9' × 8' apart.	20	..	..	20
	Total ..	2,628	3	34	2,597
TAUNGYA PLANTATION.					
Kurnool West Division.					
Kurnool West	Sowing of field crops along with forest species, 1921-22.	327	..	..	327
CULTURAL OPERATION.					
Anantapur division.					
Horsleykonda Reserved Forest.	Dibbling of bamboos ..	1	..	..	1
Do.	Clearing lantana	780	..	..	780
	Total ..	781	..	..	781

* This Reserved Forest has been transferred from class I to III with effect from 1st July 1931.

during the year 1930-31—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation.	Upkeep.	Creation.	Upkeep.	Total.					
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	Rs.	Rs.	Rs.	Rs.	Acs.	Rs.	Rs.	Rs.	Rs.
..	8	14,808	3,233	18,041	4,454	..	3,142	116	116
..	..	7,941	1,991	9,932	1,544	..	1,417	..	..
..	..	9,374	65,030	74,404	91	..	63,090	296	18,758
..	..	38,471	26,169	64,640	265	9,279	18,290	..	22
..	..	2,295	654	2,949	110	..	1,194	..	..
..	130	2,35,950	70,638	3,06,588	276	..	3,06,588	1,085	33,874
..	144	23	2,088	2,111	..	..	2,111	663	19,505
..	282	3,08,862	1,69,803	4,78,665	6,740	9,279	3,95,832	2,160	72,275
..	..	5,895	120	6,015	..	..	6,015	..	718
..	..	40	..	40	10	..	40	..	..
..	..	724	46	770	155	..	741	..	..
..	..	764	46	810	165	..	781	..	..

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres. At commencement of year, 1st April 1930.	Added during year 1st April 1930 to 31st March 1931.	Excluded during year 1st April 1930 to 31st March 1931.	On 31st March 1931.
(1)	(2)	(3)	(4)	(5)	(6)
SECOND CIRCLE—*cont.*		ACS.	ACS.		ACS.
CULTURAL OPERATION —*cont.*					
Kurnool East Division.					
Turimilla Range...					
Maddipenta Emergency coupes. ..	Tending seedlings in emergency coupes clear-felled, 1921-22 to 1924-25.	53	..	...	53 ..
Chinnamantrala Emergency coupes.	Tending seedlings in emergency coupes clear-felled, 1920-21 to 1924-25.	67	..	..	67
	Total ..	120	..	..	120
Kurnool South Division.					
Timber Coupe II Baireni series.	Maintaining 200 seedlings per acre.	72	..	..	72
Timber Coupe II Isukagundam.	Maintaining 200 seedlings per acre.	200	..	..	200
Timber Coupe II Mamidigundam.	Maintaining 200 seedlings per acre.	47	..	..	47
Timber Coupe II Ulladavanka.	Maintaining 200 seedlings per acre.	57	..	..	57
Regeneration Coupe II at Isukagundam.	Weeding	23	..	..	23
	Total ..	399	..	..	399
Kurnool West Division.					
....	Dibbling sowing, weeding and tending operations, 1919-20.	7,140	..	..	7,140
Experimental plots.					
Gundlabrahmeswaram Range.	Opening of 5 acres experimental plot for stump planting and sowing seeds.	..	5	..	5
....	Cultural operations in 5 acres experimental plot of 1929.	5	..	..	5
.. ....	Weeding the 5-acre plot, 1928-29.	5	..	..	5
....	Opening of a 5-acre plot.	..	5	..	5
	Total ..	7,150	10	..	7,160

during the year 1930-31—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation (7)	Upkeep. (8)	Creation. (9)	Upkeep. (10)	Total. (11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.	Rs.			Rs.		
..	..	..	20	20	..	..	20	..	..
..	..	..	21	21	..	..	21	..	..
..	..	..	41	41	..	..	41	..	..
..	..	..	86	86	..	..	86	..	..
..	..	167	153	320	..	..	320	..	..
..	..	..	53	53	..	..	53	..	..
..	..	..	80	80	..	..	80	..	..
..	..	..	29	29	..	..	29	..	..
..	..	167	401	568	..	..	568	..	..
..	..	33,878	9,195	43,073	..	..	43,073	..	..
119	..	119	..	119	..	..	119	..	..
..	30	..	30	30	..	..	30	..	..
..	15	..	15	15	..	..	15	..	..
23	..	23	..	23	..	..	23	..	..
142	45	34,020	9,240	43,260	..	..	43,260	..	..

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres			
		At commencement of year, 1st April 1930.	Added during year, 1st April 1930 to 31st March 1931.	Excluded during year, 1st April 1930 to 31st March 1931.	On 31st March 1931.
(1)	(2)	(3)	(4)	(5)	(6)
SECOND CIRCLE—*cont.*		ACS.	ACS.		ACS.
CULTURAL OPERATION —*cont.*					
South Cuddapah.					
Rajampet Range.					
Bodeddulabhavi Plot ..	Dibbling sandal seeds, 1920-21.	2·0	..	..	2·0
Do. well ..	Dibbling sandal seeds, 1930-31.	..	0·50	..	0·50
Tummalabailu Plot I ..	Dibbling sandal seeds, 1920-21.	2·00	..	..	2·00
Do. Plot II ..	Do.	2·0	..	..	2·0
Do. North beat near Thummalabailu kunta.	Dibbling sandal seeds, 1930-31.	..	0·50	..	0·50
Thummalabailu South beat (Ippagondivandla gunta cheruvu).	Do.	..	0·50	..	0·50
Arimanipenta Plot I ..	Dibbling sandal seeds, 1920-21.	1·0	..	..	1·0
Do Plot II ..	Dibbling sandal seeds ..	1 0	..	..	1·0
Arimanipenta beat near Pakkalakona.	Dibbling sandal seeds, 1930-31.	..	0·50	..	0·50
Vathalur beat near Mandapalli Vandlabhavi.	Do.	..	0·50	..	0·50
Ananthasamudram beat near Moriatla.	Do.	..	0·50	..	0·50
Buduguntapalli near Kukkalagundam.	Do.	..	0·50	..	0·50
Chenchannakunta beat near Chenchannakunta.	Do.	..	0·50	..	0·50
Rommupodugu beat near Puttangi river.	Do.	..	0·50	..	0·50
Kodur Range.					
Around Papanasanam rest-house.	Dibbling sandal seeds, 1921-22	0·50	..	..	0·50
Near Yerrabutla	Dibbling sandal seeds, 1929-30.	1·00	..	..	1·00
Umithala beat near 16th mile on Umithala Gundampenta road.	Dibbling sandal seeds, 1930-31.	..	0·50	..	0·50
Nendragundampenta beat near Cumbumpenta.	Do.	.	0·50	..	0·50
Gundampenta beat near footpath between 23rd and 24th mile on Gundampenta-Papanasanam road.	Do.	..	0·50	..	0·50

during the year 1930-31—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation.	Upkeep.	Creation.	Upkeep.	Total.					
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
		Rs.		Rs.	Acs.	Rs.	Rs.		
..	..	..	..	..	..	..	2	..	..
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	3	..	..
..	..	..	..	..	..	..	2	..	..
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..
..	..	3	..	3	..	..	3	..	..
..	..	2	..	2	1	2	..	..	..
..									
..									
..									
..									
..									
..									
..	..	4	..	4	..	..	4	..	..
..	..	3	..	3	..	..	3	..	..
..									
..									
..									
	..								

Done free of cost by subordinates.

Done free of cost by subordinates.

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres			
		At commencement of year, 1st April 1930.	Added during year, 1st April 1930 to 31st March 1931.	Excluded during year, 1st April 1930 to 31st March 1931.	On 31st March 1931
(1)	(2)	(3)	(4)	(5)	(6)
SECOND CIRCLE—*cont.*		ACS.	ACS.		ACS.
CULTURAL OPERATION—*cont.*					
South Cuddapah—cont.					
Kodur Range—*cont.*					
Papanasanam beat near Baggavanka between subordinates lines and rest-house.	Dibbling sandal seeds, 1930-31.	..	0 50	..	0·50
Gundampenta	Dibbling sandal seeds, 1928-29.	2·0	..	..	2
Near 18th and 19th mile at Gundampenta rest-house.	Dibbling sandal seeds, 1929-30.	1·0	..	..	1·0
Balapalle Range.					
Kangamadugu	Dibbling sandal seeds, 1920-21.	3·0	..	..	3
Magilipenta	Do.	3·0	..	..	3
Kangamadugu, Pulugurupenta trijunction road.	Dibbling sandal seeds, year not known.	0·10	..	..	0·10
Approach road to Balapalli rest-house.	Do.	0·10	..	..	0·10
By the side of Yerrodu Madugu.	Dibbling sandal seeds in 1929-30.	1·0	..	..	1
Kangamadugu beat at subordinates quarters.	Dibbling sandal seeds, 1930-31.	..	0·50	..	0·50
Pulugurupenta beat ..	Do.	..	0·50	..	0·50
Kothapalli ,, ..	Do.	..	0·50	..	0·50
Settigunta ,, ..	Do.	..	0·50	..	0 50
Peddapad ,, ..	Do.	..	1·00	..	1·00
Balapalli ,, ..	Do.	..	0·50	..	0·50
Borachintamanipenta ..	Do.	..	0·50	..	0·50
Cuddapah Range.					
Saraswatipalli beat (Kanakona).	Dibbling sandal seeds, 1930-31.	..	0·50	..	0·50
Guvvalacheruvu beat (Devarakona).	Do.	..	0·50	..	0·50
Maddimadugu beat (Machukona).	Do.	..	0·50	..	0·50
Ippapenta beat (Chennulabylu bhavi).	....	..	0·50	..	0·50
Pullalamadugu beat (Bandlamadugu).	Dibbling of sandal seeds.	..	0·50	..	0·50
Manikapalli beat (Maddilamadugu).	Do.	..	0·50	..	0·50
Ankimadugu beat (Gorrimadugu).	Do.	..	0·50	..	0·50

during the year 1930-31—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation.	Upkeep.	Creation.	Upkeep.	Total.					
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
		RS.		RS.	ACS.	RS	RS.		
Done free of cost by subordinates.									
..	..	4	..	4	2	4	..	..	..
..	..	3	..	3	1	3	..	..	..
..	..	3	..	3	..	..	3	..	..
..	..	3	..	3	..	..	3	..	..
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..
Done free of cost by subordinates.									

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres			
		At commencement of year, 1st April 1930.	Added during year, 1st April 1930 to 31st March 1931.	Excluded during year, 1st April 1930 to 31st March 1931.	On 31st March 1931.
(1)	(2)	(3)	(4)	(5)	(6)
SECOND CIRCLE—*cont.*		ACS.	ACS.		ACS.
CULTURAL OPERATION—*cont.*					
South Cuddapah—cont.					
Cuddapah Range—*cont.*					
Kerthemadugu beat (Chelamabhavi).	Dibbling of sandal seeds ..	..	0·50	..	0·50
Chitvel Range.					
Moodurallagundam vankah.	Dibbling of seeds in 1921-22.	3	..	..	3
Gundlakona	Do.	1	..	..	1
Kootalamarri	Dibbling of seeds in 1918-19.	4	..	..	4
Nalareddikona	Dibbling of seeds in 1918.	1	..	..	1
Chamakona	Dibbling of seeds in 1929-30.	1	..	..	1
Salivendla beat (Chamakona).	Dibbling of seeds in 1930-31.	..	0·50	..	0·50
Chiyyavaram beat (Metrasikara).	Do.	..	0·50	..	0·50
Reddivaripalli beat (Moduralagundam).	Dibbling sandal seeds in 1930-31.	..	0·50	..	0·50
Rachapalli beat (Kuntakona).	Do.	..	0·50	..	0·50
Venkatarajupalli beat Mallalamma Nakkanikona.	Do.	..	0 50	..	0·50
Rachakuntla beat (Reddicheruvu).	Do.	..	0·50	..	0·50
Chitval beat (Nukireddikona).	Do.	..	0·50	..	0·50
Dandlopalli beat (Rendubhavi Tanah).	Do.	..	0·50	..	0·50
Mallalamma Kanama ..	Dibbling sandal seeds in 1929-30.	1	..	..	1
Sanipaya Range.					
Ammabhavi	Dibbling sandal seeds in 1918-19.	1·50	..	..	1·50
Mudampad rest-house compound.	Do.	2·00	..	..	2·00
Near old tanah in Mudampad beat.	Do.	1·00	..	..	1·00
Nallakona vankah in Seshachallam extension.	Do.	0 50	..	..	0·50
Chelagadda narwa ..	Dibbling of sandal seeds in 1929-30.	2·00	..	..	2·00
Stream near Ippanabhavi.	Do.	2·00	..	..	2·00

during the year 1930–31—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement exoluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation.	Upkeep.	Creation.	Upkeep.	Total.					
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
		Rs.		Rs.	Acs.	Rs.	Rs.		
				Done free of cost by subordinates.					
..	..	24	..	24	..	..	24	..	..
..	..	4	..	4	..	..	4	..	..
..	..	17	..	17	..	..	17	..	..
..	..	8	..	8	1	8	..	..	..
..	..	3	..	3	..	..	3	..	..
				Done free of cost by subordinates.					
..	..	2	..	2	1	2	..	..	..
				Details not known.					
..	..	2	..	2	..	..	2	..	..
..	..	3	..	3	..	..	3	..	..

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres			
		At commencement of year, 1st April 1930.	Added during year, 1st April 1930 to 31st March 1931.	Excluded during year, 1st April 1930 to 31st March 1931.	On 31st March 1931.
(1)	(2)	(3)	(4)	(5)	(6)
SECOND CIRCLE—*cont.*		ACS.	ACS.		ACS.
CULTURAL OPERATION—*cont.*					
South Cuddapah—cont.					
Sanipaya Range—*cont.*					
Gadikola beat (Mangalakona).	Dibbling of sandal seeds in 1930-31.	..	0·50	..	0·50
Kallimotta beat (Dasarikona).	Do.	..	0·50	..	0·50
Veeraballi beat Gandirastha on the bank of Mandanya river.	Do.	..	0·50	..	0·50
Palem—Polem beat (Neetikona).	Do.	..	0·50	..	0·50
Rayavaram beat (Pulikona).	Do.	..	0·50	..	0·50
Sanipaya beat (Tummakona).	Do.	..	0·50	..	0·50
Meedampad (Nallakona)..	Do.	..	0·50	..	0·50
Dinnala beat (Bonthalla cheruvu).	Do.	..	0·50	..	0·50
Jillalamanda beat (Poribanda).	Do.	..	0·50	..	0·50
Total ..	..	39·70	23·00	..	62·70
Grand total under "Cultural operation".	..	8,489·70	33·00	..	8,522 70
FOURTH CIRCLE.					
Vellore.					
Ambur tope	Planting in 1913	6·00	..	..	6·00
Amerdi plantation ..	Clear-felling and artificially stocking with timber species in 1922-23.	92·25	..	..	92·25
Total ..	..	98·25	..	..	98·25
Central Salem.					
Kurumbapatti plantation.	Sowing teak, 1920-21 ..	1·75	..	..	1·75
Ayyanthirumaligai ..	Sowing several species, 1929-30.	..	..	..	..
Chitteries	Lac cultivation in 1929-30.	..	..	..	..
Total ..	..	1·75	..	..	1·75

during the year 1930-31—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation.	Upkeep.	Creation.	Upkeep.	Total					
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.	Rs.	Acs.	Rs.	Rs.	Rs.	Rs.
Done free of cost by subordinates.									
..	..	88	..	88	6	19	76	..	..
142	45	35,039	9,728	44,767	171	19	44,726	..	..
..	15	..	30	30	..	..	30	5	1,736
..	5	3,102	2,220	5,322	..	..	5,322	50	10,846
..	20	3,102	2,250	5,352	..	..	5,352	55	12,582
..	..	202	34	236	..	..	236	..	..
..	..	131	69	200	..	..	200	..	..
196	..	200	..	200	..	..	200	..	..
196	..	533	103	636	..	..	636	..	..

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres			
		At commencement of year, 1st April 1930.	Added during year, 1st April 1930 to 31st March 1931.	Excluded during year, 1st April 1930 to 31st March 1931.	On 31st March 1931.
(1)	(2)	(3)	(4)	(5)	(6)
		ACS.	ACS.		ACS.
FOURTH CIRCLE—*cont.*					
South Salem.					
Tope attached to the District Forest Officer's quarters.	Raising mango trees, 1904.	9·5	...	...	9·5
	Grand total ..	109·50	..	...	109·50
FIFTH CIRCLE.					
Madura.					
Gundan shola blue gum plantation.	....	245	..	..	245
Pambar pine plantation.	1906	842	..	..	842
Gundar valley	Planting *acacia decurrens.*	148	..	..	148
Valacombai teak plantation.	....	18	..	..	18
Vannathiparai teak plantation.	1870	4	..	..	4
Sethuvaikal new teak plantation.	1920–21	53	..	..	53
Alagar Hills Planting Mahagony.	....	3	..	..	3
Tinnevelly.					
Kudiramoli teri Reserved Forest.	Dibbling palmyra nuts and Dodonea and Viscosa seeds.	4,544	1,100	..	5,644
Kariar teak plantation ..	1922-24	85	..	..	85
Kodamady teak plantation.	1917	111	..	..	111
Richmond plantation ..	1906	1	..	..	1
Kariar Kani area ..	1912	23	..	..	23
Haynes plantation ..	.....	23	..	..	23
Mundanthurai	Dibbling teak	10	..	..	10
North Coimbatore.					
Minchiguly plantation ..	Dibbling teak, vengai and rosewood seeds and watering and weeding, 1918.	5	..	..	5
Ainagiri plantation ..	Planting seedlings of shola species, 1918.	42	..	..	42
Tinnevelly (*b*)	.....	..	..	..	..
	.. Total ..	6,157	1,100	...	7,257

(*a*) Represents expenditure on the maintenance of the acacia fire belt.
(*b*) A sum of Rs. 291 was spent on experiments conducted by the Assistant Working Plans Officer

during the year 1930-31—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation. (7)	Upkeep. (8)	Creation. (9)	Upkeep. (10)	Total. (11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.
..	..	467	1,760	2,227	..	..	2,227	..	280
196	20	4,102	4,113	8,215	..	..	8,215	55	12,862
..	..	18,985	..	18,985	..	..	18,985	118	5,627
..	(a) 674	33,486	5,452	38,938	..	..	38,938	107	1,077
..	..	3,106	131	3,237	..	..	3,237	..	..
..	..	1,124	142	1,266	..	..	1,266	..	2,315
..	..	1,405	..	1,405	..	..	1,405	..	2,125
..	..	3,770	759	4,529	..	..	4,529	..	..
..	..	64	..	64	..	..	64	..	..
2,639	..	11,847	1,899	13,746	..	..	13,746	1,523	54,002
..	..	1,642	757	2,399	..	..	2,399	..	107
..	..	4,236	1,237	5,473	..	..	5,473	..	218
..	..	5	..	5	..	..	5	..	94
..	..	47	310	357	..	..	357	..	178
..	..	26	37	63	..	..	63	..	..
..	..	182	35	217	..	..	217	..	..
..	..	123	618	741	..	..	741	..	..
..	..	670	522	1,192	..	..	1,192	..	..
..	..	..	..	..	..	..	..	..	..
2,639	674	80,718	11,899	92,614	..	..	92,614	1,748	65,743

in evergreen forests and Rs. 10 on planting stumps in teak plantation in fuel coupe 28 Padarmalai.

Plantations not under Working Plans

Divison and forest.	Method of formation and year of commencement.	Area in acres.			
		At commencement of year, 1st April 1930.	Added during year, 1st April 1930 to 31st March 1931.	Excluded during year, 1st April 1930 to 31st March 1931.	On 31st March 1931.
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE.		ACS.	ACS.		ACS.
Mangalore North.					
Udipi Range.					
Someshwar	Sowing of Hopea, Dhupa and wild jack in prepared patches, 1920-21 and 1927-28.	659	..	..	659
	Sowing of teak, xylia, rosewood, etc., in gaps formed by timber felling in coupe IV, 1929-30.	2	..	..	2
	Sowing of teak, xylia, rosewood, etc., in gaps formed by timber felling in coupe V, 1929-30 and 1930-31	4	..	..	4
	Sowing of Hopea in timber coupe III felled area in 1930-31.	65	..	..	65
	Repairing ground for sowing of Hopea in coupe III felled area in 1931-32.	..	91	..	91
	Repairing ground for sowing of teak, etc., in gaps formed by timber felling in coupe VI-a in 1931-32.	..	4	..	4
Jatkatmale	Sowing of Hopea and Dhupa in prepared patches.	1,139	..	..	1,139
Halesomeshwar	Sowing of Hopea in prepared patches, 1922-23, 1924-25 and 1926-27.	1,744	..	..	1,744
Coondapoor Range					
Madibare	Sowing of xylia in prepared patches, 1927-28.	11	..	..	11
Mangalore Range.					
Kodimale	Sowing of Hopea in prepared patches, 1921-22.	52	..	..	52
Mangalore South.	Total ..	3,676	95	..	3,771
Parappa Reserved Forest, do. VI (portion).	Sowing of deciduous species after clearfelling and burning, 1924.	16	..	..	16
Parappa Reserved Forest, compartment VIII (portion).	1926-27 do	23	..	..	23
Parappa Reserved Forest, compartments I to X.	Sowing and planting of evergreen species.	1,967	..	..	1,967

during the year 1930-31—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue, from date of creation.
Creation.	Upkeep.	Creation.	Upkeep.	Total.					
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
RS.	RS.	RS.	RS.	RS.	ACS.	RS.	RS.		
..	257	2,593	1,929	4,522	19	..	4,414	..	..
..	26	155	26	181	..	..	181	..	..
40	..	159	..	159	..	..	159	..	..
292	..	416	..	416	..	..	416	..	..
200	..	200	..	200	..	..	200	..	..
51	..	51	..	51	..	..	51	..	..
..	204	3,122	5,686	8,808	152	..	8,039	..	..
26	911	7,254	5,055	12,309	99	..	12,034	..	..
..	..	121	25	146	..	..	146	..	..
..	..	145	14	159	..	..	159	..	..
609	1,398	14,216	12,735	26,951	270	..	25,799	..	..
..	17	99	123	222	..	..	222	..	..
..	24	407	265	672	..	..	672	..	..
..	..	5,456	5,861	11,317	275	1,021	10,296	..	..

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres			
		At commencement of year, 1st April 1930.	Added during year, 1st April 1930 to 31st March 1931.	Excluded during year, 1st April 1930 to 31st March 1931.	On 31st March 1931.
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE—*cont.*					
Mangalore South—cont.		ACS.	ACS.		ACS.
Parappa compartment IX (portion).	Sowing with *Artocarpus hirsuta* and *Malia Dubia* —(area felled in 1926-27) in 1929.	16	..	..	16
Jalsur East Reserved Forest, coupes I and II.	Sowing and planting of Hopea under existing growth.	252	..	..	252
Do.	Natural regeneration of evergreen species, 1926-27.	147	..	..	147
Parappa Reserved Forest, compartment V (portion).	Sowing and planting of teak, 1930.	30	..	..	30
Aletti West Reserved Forest, strip II.	Artificial regeneration over 35 acres with Hopea, etc., and natural regeneration over 20 acres—(area felled in 1928-29) 1929-30 plantation.	55	..	..	55
Aletti West Reserved Forest, strips I, III to V.	Natural regeneration, i.e., tending natural Hopea seedlings over an area of 56 acres and artificial regeneration with Hopea, *Artocarpus hirsuta* over 121 acres—(area felled in 1929-30) 1930-31 plantation.	..	177	..	177
Uppinangadi Range.					
Porkala and Padnur Reserved Forest.	Sowing and planting of evergreen species, mainly Hopea, 1920-24.	1,405	..	..	1,405
Nerankimale Reserved Forest.	Clear-felling, burning and sowing deciduous species.	89	..	..	89
Kidu Reserve	Natural regeneration of evergreen forests started in 1922.	19	..	..	19
Mujur Reserved Forest, coupe I.	Planting Hopea seedlings over 23 acres, planting Hopea in patches in gaps formed by felling over 131 acres and planting teak and vengai over 1 acre (1930-31) plantation.	..	155	..	155
Puttur Range.					
Nalkur Reserved Forest, coupes I and II.	Natural regeneration of evergreen forests started in 1922.	1,154	..	..	1,154

during the year 1930-31—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation. (7)	Upkeep. (8)	Creation. (9)	Upkeep. (10)	Total. (11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.	Rs.	Acs.	Rs.	Rs.		
..	105	617	135	752	5	197	555	..	..
..	..	1,541	2,695	4,236	..	..	4,236	..	..
..	75	289	4,741	5,030	..	..	5,030	..	..
722	..	900	..	900	..	..	900	..	..
..	65	206	65	271	..	..	271	..	..
706	..	706	..	706	..	..	706	..	..
..	..	6,520	6,984	13,504	214	217	13,287	..	..
..	..	357	559	916	..	..	916	..	..
..	..	..	170	170	..	..	170	..	..
275	..	275	..	275	..	..	275	..	..
..	163	..	8,730	8,730	..	..	8,730	..	..

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres			
		At commencement of year, 1st April 1930.	Added during year, 1st April 1930 to 31st March 1931.	Excluded during year, 1st April 1930 to 31st March 1931.	On 31st March 1931.
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE.—*cont.*		ACS.	ACS.	ACS.	ACS.
Puttur Range—*cont.*					
Sampaji Reserved Forest, coupe II.	Clear-felling, burning and sowing with teak (area felled in 1929-30), 1930 plantation.	26	..	..	26
Do.	Experimental area of 1929-30, clear-felling, burning and sowing with teak.	4	..	..	4
Sampaji Reserved Forest, coupe III.	Clear-felling, burning and sowing teak (plantation, 1931-32)	..	12	..	12
Beltangady Range.					..
Mundaje Kap Reserved Forest.	Sowing and planting of evergreen species (Hopea), 1926.	277	..	..	277
Do.	Sowing and planting of evergreen species (Hopea), 1927.	132	..	..	132
	Total ..	5,612	344	..	5,956
Wynaad.					
Kannotte Range	Regular plantations ..	273	..	..	273
	Taungya do. ..	354	..	..	354
	Cultural operations ..	4	(*a*) 1,812	..	1,816
	Total ..	631	1,812	..	2,443
Nilambur—Nil.					
The Nilgiris—Nil.					..
Palghat.					
Puliyampatti tope reserve.	Taungya plantations, 1919-20.	20	..	..	20
Vallapathi	Cultural operations, 1929-30.	39	..	..	39
Muthikulam bungalow compound.	Cultural operations, 1921-22.	4	..	..	4
Palghat Range office compound.	Cultural operations, 1919-20.	1	..	..	1
Dhone Reserve	Do.	10	..	..	10
Elival teak plantation (old).	Do.	10	..	..	10
Elival teak plantation	Cultural operations, 1928-29.	21	..	..	21
	Cultural operations, 1929-30.	33	..	..	33

(*a*) Represents sleeper worked areas in Peria Reserve during 1925-26, 1927-28 and 1929-30 in which

during the year 1930-31—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during year.	Total revenue from date of creation.
Creation. (7)	Upkeep. (8)	Creation. (9)	Upkeep. (10)	Total. (11)	(12)	(13)	(14)	(15)	(16)
RS.	RS.	RS.	RS.	RS.	ACS.	RS.	RS.		RS.
670	..	948	..	948	..	..	948	..	..
127	..	171	..	171	..	..	171	..	..
193	..	193	..	193	..	..	193	..	..
..	37	1,725	736	2,461	..	..	2,461	..	..
..	38	624	294	918	..	..	918	..	..
2,693	524	21,034	31,358	52,392	494	1,435	50,957	..	..
..	69	1,284	6,271	7,555	..	..	7,555	..	2,344
..	13	902	4,435	5,337	..	..	5,337	..	3,488
189	..	200	10	210	..	..	210	..	..
189	82	2,386	10,716	13,102	..	..	13,102	..	5,832
..	..	..	329	329	..	..	329	..	..
..	..	573	59	632	..	..	632	..	..
..	..	110	..	110	..	..	110	..	..
..	..	50	53	103	..	..	103	..	..
..	6	221	129	350	..	..	350	..	..
..	5	..	144	144	..	..	144	..	..
..	21	343	107	450	..	..	450	..	..
..	112	677	112	789	..	..	789	..	..

223 gaps of different sizes were regenerated. It does not represent the actual area regenerated.

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres.			
		At commencement of year, 1st April 1930.	Added during year, 1st April 1930 to 31st March 1931.	Excluded during year 1st April 1930 to 31st March 1931.	On 31st March 1931.
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE—*cont.*		ACS.	ACS.	ACS.	ACS.
Palghat—cont.					
Elival teak plantation—*cont.*	Cultural operations—				
	1930-31	..	35	..	35
	1931-32	..	..	..	..
	1932-33	..	..	..	..
Chenat Nair plantation ..	1920-21	264	..	..	264
Dhone 4-acre plot (teak) ..	1928-29	4	..	..	4
	1929-30	26	..	..	26
	1930-31	..	23	..	23
	1931-32	..	..	..	..
	1932-33	..	..	..	..
Sappal teak plantation ..	1928-29	5	..	..	5
	1929-30	13	..	..	13
	1930-31	..	..	..	..
Regeneration in Silent Valley, coupe I.	1929-30	..	..	..	..
Regeneration in Silent Valley, coupe II	1930-31	..	..	..	..
Experimental nursery of satin wood.	1928-29	..	..	..	..
Evergreen nursery at Dhoni.	1928-29	..	..	..	..
Nursery for coffee robusta.	1928-29	..	..	..	..
Nursery Andaman Padauk.	1928-29	..	..	..	..
Nursery Burma Padauk ..	1928-29	..	..	..	..
Evergreen nursery in Silent Valley	1928-29	..	..	..	..
	Total ..	450	58	..	508
	Grand Total ..	10,369	2,309	..	12,678
	Parlakimedi Maliahs ..	217	18	..	235
	Grand Total, Presidency ..	30,466	3,645	46	34,066

during the year 1930-31—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation.	Upkeep.	Creation.	Upkeep.	Total.					
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
RS.	RS.	RS.	RS.	RS.	ACS.	RS.	RS.	RS.	RS.
670	..	840	..	840	..		840	..	..
387	..	387	..	387	..	..	387	..	..
70	..	70	..	70	..	..	70	..	..
..	134	2,866	5,073	7,939	..	..	7,939	..	..
..	4	50	16	66	..	..	66	..	..
..	219	625	219	844	..	..	844	..	..
618	..	914	..	914	..	..	914	..	..
310	..	310	..	340	..	..	340	..	..
60	..	60	..	60	..	..	60	..	..
..	5	103	9	112	..	..	112	..	..
..	45	386	45	431	..	..	431	..	..
..	..	863	..	863	..	..	863	..	..
..	40	674	40	714	..	..	714	..	..
244	..	244	..	244	..	..	244	..	..
..	..	13	13	26	..	..	26	..	..
..	..	30	..	30	..	..	30	..	..
..	..	12	..	12	..	..	12	..	..
..	..	18	..	18	..	..	18	..	..
..	..	7	..	7	..	..	7	..	..
..	..	48	..	48	..	..	48	..	..
2,359	591	10,524	6,348	16,872	..	..	16,872	..	..
5,850	2,595	48,160	61,157	1,09,317	764	1,435	1,06,730	..	5,832
65	..	646	1,625	2,272	..	..	2,270	7	7
10,575	5,487	5,36,764	2,62,726	7,99,498	7,687	10,733	7,14,009	6,506	4,40,546

Annual Form No. 35.

Forest Department, Madras Presidency.

Outturn (in thousands of cubic feet, solid) of timber and fuel during the year 1930-31 and agency of exploitation.

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
First Circle.															
I. Reserved Forests.															
Ganjam	109	26	17	18	170	..	69	3	..	72	..	..	..	..	..
Vizagapatam	10	..	..	..	10	1	24	1	..	26	..	..	..	..	..
Godavari, Upper ..	27	1	..	..	28	14	..	..	..	14	..	..	..	.	..
Do. Lower ..	3	17	..	..	20	..	..	..	..	..	..	..	..	..	..
Guntur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	149	44	17	18	228	15	93	4	..	112	..	..	..	..	..
II. Leased Forests—Nil.															
III. Reserved Lands—Nil.															
IV. Unreserved Lands.															
Ganjam	22	34	21	..	77	..	..	..	..	..	..	..	..	..	..
Vizagapatam	..	..	..	..	..	..	16	..	..	16	..	..	..	..	..
Godavari, Upper ..	4	34	..	..	38	4	15	..	..	19	..	..	..	..	..
Do. Lower ..	..	217	40	..	257	..	6	..	..	6	..	..	..	..	..
Guntur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	26	285	61	..	372	4	37	..	..	41	..	..	..	..	..
Grand Total ..	175	329	78	18	600	19	130	4	..	153	..	..	..	..	..

Outturn (in thousands of cubic feet, solid) of timber and fuel during the year 1930-31 and agency of exploitation—*cont.*

Division.	Miscellaneous.					Total timber.					Fuel.					Total outturn.
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
FIRST CIRCLE—*cont.*																
I. Reserved Forests—cont.																
Ganjam	..	..	..	..	..	109	95	20	18	242	34	361	2	55	452	694(*a*)
Vizagapatam	..	..	..	..	..	11	24	1	..	36	..	194	..	..	194	230(*a*)
Godavari, Upper ..	..	..	..	..	..	41	1	..	..	42	..	..	..	..	..	42(*a*)
Do. Lower ..	..	..	..	..	..	3	17	..	..	20	29	376	110	..	515	535(*a*)
Guntur	2	7	..	..	9	2	7	..	..	9	12	774	..	..	786	795(*a*)
Nellore	..	..	..	..	..	..	..	..	..	..	1	549	..	..	550	550(*a*)
Total ..	2	7	..	..	9	166	144	21	18	349	76	2,254	112	55	2,497	2,846
II. Leased Forests—Nil.																
III. Reserved Lands—Nil.																
IV. Unreserved Lands—cont.																
Ganjam	..	..	..	..	..	22	34	21	..	77	..	100	..	..	100	177
Vizagapatam	..	..	..	..	..	..	16	..	..	16	..	52	..	..	52	68(*a*)
Godavari, Upper ..	..	..	..	..	..	8	49	..	..	57	4	44	..	..	48	105(*a*)
Do. Lower ..	..	..	..	..	..	..	223	40	..	263	..	65	..	..	65	328
Guntur	..	29	16	..	45	..	29	16	..	45	..	142	..	..	142	187
Nellore	..	11	17	..	28	..	11	17	..	28	..	23	..	..	23	51
Total ..	..	40	33	..	73	30	362	94	..	486	4	426	..	..	430	916
Grand Total ..	2	47	33	..	82	196	506	115	18	835	80	2,680	112	55	2,927	3,762

(*a*) The figures for all divisions under reserved forests and for Vizagapatam and Upper Godavari under unreserved lands are actuals.

GANJAM :—Under "Unreserved lands" the figures under "Purchasers" are estimates obtained by converting revenue at seigniorage rates. The other figures are actuals.

LOWER GODAVARI :—The figures under "Unreserved lands" for timber are estimates obtained by converting revenue at Re. 0—1—6 per cubic foot. The figures under free grantees and other figures are actuals.

GUNTUR :—The figures under "Unreserved lands" except under free grantees are estimates obtained by converting revenue at Re. 0—1—0 per cubic foot. Under free grantees they are actuals.

NELLORE :—The figures under "Unreserved lands" are estimates obtained by converting revenue at Re. 0—0—3 per cubic foot.

Outturn (in thousands of cubic feet, solid) of timber and fuel during the year 1930-31 and agency of exploitation—*cont.*

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
SECOND CIRCLE.															
I. Reserved Forests.															
Anantapur	..	15	1	..	16	..	..	..	..	..	..	..	..	..	..
Kurnool, East ..	1	9	..	..	10	1	1	1	..	3	1	..	..	..	1
Do. South ..	28	16	..	..	44	5	110	2	..	117	..	..	..	..	..
Do. West ..	2	23	..	..	25	1	11	6	..	18	1	37	..	..	38
Cuddapah, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	31	63	1	..	95	7	122	9	..	138	(*a*) 2	(*a*)37	..	..	39
II. Leased Forests—Nil.															
III. Reserved Lands—Nil.															
IV. Unreserved Lands.															
Anantapur	..	109	5	..	114	..	..	..	..	..	..	..	..	..	..
Kurnool, East ..	..	3	27	..	30	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	3	..	..	3	..	4	..	..	4	..	..	..	..	..
Do. West ..	..	29	..	..	29	..	..	..	..	..	..	..	..	..	..
Cuddapah, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	144	32	..	176	..	4	..	..	4	..	..	..	..	..
Grand Total ..	31	207	33	..	271	7	126	9	..	142	(*a*) 2	(*a*)37	..	..	39

(*a*) Sawn timber.

Outturn (in thousands of cubic feet, solid) of timber and fuel during the year 1930–31 and agency of exploitation—*cont.*

Division.	Miscellaneous.					Total timber.					Fuel.					Total outturn.
	Government. (17)	Purchasers. (18)	Free grantees. (19)	Right-holders. (20)	Total. (21)	Government. (22)	Purchasers (23)	Free grantees. (24)	Right-holders. (25)	Total. (26)	Government. (27)	Purchasers. (28)	Free grantees. (29)	Right-holders. (30)	Total. (31)	(32)
SECOND CIRCLE—*cont.*																
I. Reserved Forests —cont.																
Anantapur	..	..	..	..	..	..	15	1	..	16	3	169	..	..	172	188 *
Kurnool, East ..	1	1	..	..	2	4	11	1	..	16	..	31	..	..	31	47 *
Do. South ..	1	..	..	..	1	34	126	2	..	162	33	192	..	..	225	387 *
Do. West ..	..	..	..	..	..	4	71	6	..	81	11	1,305	..	..	1,316	1,397 *
Cuddapah, North ..	..	32	1	..	33	..	32	1	..	33	32	2,061	..	..	2,093	2,126 *
Do. South ..	3	19	3	..	25	3	19	3	..	25	101	5,952	..	..	6,053	6,078 *
Total ..	5	52	4	..	61	45	274	14	..	333	180	9,710	..	..	9,890	10,223
II. Leased Forests—Nil.																
III. Reserved Lands—Nil.																
IV. Unreserved Lands —cont.																
Anantapur	..	..	..	..	..	..	109	5	..	114	..	8	..	..	8	122 †
Kurnool, East ..	..	..	..	..	..	..	3	27	..	30	..	4	..	..	4	34 †
Do. South ..	..	..	..	..	..	..	7	..	..	7	..	11	..	..	11	18 †
Do. West ..	..	..	..	..	..	..	29	..	..	29	..	43	..	..	43	72 †
Cuddapah, North ..	..	1	..	..	1	..	1	..	..	1	..	11	..	..	11	12 †
Do. South ..	..	3	..	..	3	..	3	..	..	3	..	5	..	..	5	8 †
Total ..	..	4	..	..	4	..	152	32	..	184	..	82	..	..	82	266
Grand Total ..	5	56	4	..	65	45	426	46	..	517	180	9,792	..	..	9,972	10,489

* Actuals.

† Estimates based on revenue collected by Tahsildars. Timber at Rs. 2-8-0 per cart-load of 20 cubic feet and fuel at Rs. 1-4-0 per cart-load of 20 cubic feet.

Outturn (in thousands of cubic feet, solid) of timber and fuel during the year 1930-31 and agency of exploitation—*cont.*

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
FOURTH CIRCLE.															
I. Reserved Forests.															
Chittoor	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vellore	..	..	..	..	..	(*c*) ..	..	..	..	..	..	..	..	..	..
Salem, North ..	..	(*c*) ..	..	..	..	..	..	..	..	..	(*d*) 1	..	..	..	1
Do. Central ..	1	10	..	..	11	..	..	..	..	..	..	..	..	..	..
Do. South ..	(*c*) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	1	10	..	..	11	..	..	..	..	..	1	..	..	..	1
II. Leased Forests —Nil.															
III. Reserved Lands —Nil.															
IV. Unreserved Lands.															
Chittoor	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Salem, North ..	..	..	..	..	..	..	40	..	..	40	..	..	..	..	..
Do. Central ..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	2	..	2	..	40	..	..	40	..	..	..	..	..
Grand Total ..	1	10	2	..	13	..	40	..	..	40	1	..	..	..	1

(*a*) Represents sandalwood less than 500 cubic feet. Hence ignored. (*b*) Represents sandalwood.
(*c*) Timber less than 500 cubic feet. Hence ignored. (*d*) Sawn timber and it represents the net outturn of sawn materials.
Sandalwood two quarters = One cubic foot. No charcoal was obtained.
Government Agency.—Based on actuals. *Reserves—Timber and fuel—Purchasers.*—Chittoor and Central Salem—Based on actuals.
Vellore and South Salem—Actuals based on contractor's accounts.

Outturn (in thousands of cubic feet, solid) of timber and fuel during the year 1930–31 and agency of exploitation—*cont.*

Division.	Miscellaneous.					Total timber.					Fuel.					Total outturn.
	Government. (17)	Purchasers. (18)	Free grantees. (19)	Right-holders. (20)	Total. (21)	Government. (22)	Purchasers. (23)	Free grantees. (24)	Right-holders. (25)	Total. (26)	Government. (27)	Purchasers. (28)	Free grantees. (29)	Right-holders. (30)	Total. (31)	(32)
FOURTH CIRCLE—*cont.*																
I. Reserved Forests—cont.																
Chittoor	(*a*) 2	1	..	..	3	2	1	..	..	3	21	524	..	..	545	548
Vellore	(*b*) 11	21	..	..	32	11	21	..	..	32	27	252	..	..	279	311
Salem, North ..	(*b*) 6	(*c*) ..	..	..	6	7	..	..	..	7	6	118	..	..	124	131
Do. Central ..	(*b*) 1	..	..	..	1	2	10	..	..	12	12	229	..	..	241	253
Do. South ..	(*b*) 1	1	..	..	2	1	1	..	..	2	9	146	..	..	155	157
Total ..	21	23	..	..	44	23	33	..	..	56	75	1,269	..	..	1,344	1,400
II. Leased Forests—Nil.																
III. Reserved Lands—Nil.																
IV. Unreserved Lands—cont.																
Chittoor	(*a*) ..	25	3	..	28	..	25	3	..	28	..	22	..	..	22	50
Vellore	..	153	5	..	158	..	153	5	..	158	..	458	..	..	458	616
Salem, North ..	(*b*) 2	..	2	..	4	2	40	2	..	44	..	13	..	..	13	57
Do. Central ..	..	334	..	..	334	..	334	2	..	336	..	81	..	..	81	417
Do. South ..	..	102	5	..	107	..	102	5	..	107	..	79	..	..	79	186
Total ..	2	614	15	..	631	2	654	17	..	673	..	653	..	..	653	1,326
Grand Total ..	23	637	15	..	675	25	687	17	..	729	75	1,922	..	..	1,997	2,726

North Salem.—Timber calculated on money value at 2 annas per cubic foot and fuel based on actuals furnished by coupe contractors.

Unreserved Lands—Purchasers—Timber and fuel—Based on money value obtained by sale in all divisions as follows :—

Chittoor.—Trees on darkhast lands at 3 annas per cubic foot and wind-fallen trees at 1½ annas per cubic foot.

Vellore.—Timber at 2 annas per cubic foot and fuel at one anna per cubic foot.

North Salem—Timber at 2 annas per cubic foot and fuel at 1¾ annas per cubic foot.

Central and South Salem.—Timber at 4 annas per cubic foot and dead tree and fuel at one anna per cubic foot.

Free grants—Palmyra trees—

Chittoor and Central Salem.—Twenty cubic feet per tree.

Vellore—Ten cubic feet per tree.

South Salem—Seven cubic feet per tree.

Other timber based on seigniorage rates.

Outturn (in thousands of cubic feet, solid) of timber and fuel during the year 1930-31 and agency of exploitation—*cont.*

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
FIFTH CIRCLE.															
I. Reserved Forests.															
Kollegal	11	2	..	..	13	..	..	..	..	..	..	(*g*) 2	..	..	2
Coimbatore, North ..	6	5	..	..	11	15	..	..	..	15	..	..	..	..	..
Do. South ..	(*a*)126	..	..	..	126	(*b*) 2	..	..	..	2	(*c*) 53	..	..	..	53
Madura	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..
Tinnevelly	..	70	..	..	70	..	1	..	..	1	(*g*) 6	(*g*) 11	..	..	17
Total ..	143	77	..	..	220	18	1	..	..	19	59	13	..	..	72
II. Leased Forests.															
Coimbatore, South ..	(*e*) 4	..	..	..	4	..	..	..	..	..	(*f*) 1	..	..	..	1
III. Reserved Lands—Nil.															
IV. Unreserved Lands.															
Kollegal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Coimbatore, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Madura	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tinnevelly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grand Total ..	147	77	..	..	224	18	1	..	..	19	60	13	..	..	73

(*a*) Includes 111,220 c.ft. of timber extracted from Mount Stuart Government forests.
(*b*) Represents 1,903 c.ft. of do. do.
(*c*) Do. Punachi squared timber 7,177 c.ft., Valparai sleepers 43,862 c.ft., and red-cedar scantlings from Valparai 2,185 c.ft.
(*d*) Do. brake poles from Punachi Range (1,400 c.ft.), spokes and felloes from Punachi Range (748 c.ft.) and spokes and felloes—Mount Stuart (3,250 c.ft.).
(*e*) Do. 3,801 c.ft of timber from Mount Stuart leased forests.
(*f*) Do. 740 c.ft. do. do.
(*g*) Do. square timber.

Outturn (in thousands of cubic feet, solid) of timber and fuel during the year 1930-31 and agency of exploitation—*cont.*

Division.	Miscellaneous.					Total timber.					Fuel.					Total outturn.
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
FIFTH CIRCLE—*cont.*																
I. Reserved Forests—cont.																
Kollegal	..	4	..	..	4	11	8	..	..	19	..	305	..	..	305	324
Coimbatore, North ..	..	..	..	..	..	21	5	..	..	26	22	764	..	..	786	812
Do. South ..	(*d*) 5	1	..	..	6	186	1	..	..	187	20	179	..	..	199	386
Madura	..	3	..	..	3	1	3	..	..	4	53	724	..	..	777	781
Tinnevelly	..	3	..	..	3	6	85	..	..	91	1	579	..	..	580	671
Total ..	5	11	..	..	16	225	102	..	..	327	96	2,551	..	..	2,647	2,974
II. Leased Forests—cont.																..
Coimbatore, South ..	..	..	..	..	..	5	..	..	..	5	..	..	..	..	..	5
III. Reserved Lands—Nil.																
IV. Unreserved Lands—cont.																
Kollegal	..	17	..	..	17	..	17	..	..	17	..	5	..	..	5	22
Coimbatore, North ..	..	41	10	..	51	..	41	10	..	51	..	43	..	..	43	94
Do. South ..	..	9	1	..	10	..	9	1	..	10	..	54	..	..	54	64
Madura	..	143	7	..	150	..	143	7	..	150	..	157	..	..	157	307
Tinnevelly	..	..	6	..	6	..	..	6	..	6	..	55	..	..	55	61
Total ..	..	210	24	..	234	..	210	24	..	234	..	314	..	..	314	548
Grand Total ..	5	221	24	..	250	230	312	24	..	566	96	2,865	..	..	2,961	3,527

Factor of conversion.
Sandalwood 2 quarters = 1 c.ft.

Unreserved lands.
North Coimbatore and Kollegal.
South Coimbatore.

Conversion of money value.
Miscellaneous timber : 2 annas = 1 c.ft.,
Do. 4 annas = 1 c.ft.
Fuel .. 1 anna = 1 c.ft.
Tinnevelly and Madura : Timber and fuel 1 anna = 1 c.ft.

Outturn (in thousands of cubic feet, solid) of timber and fuel during the year 1930-31 and agency of exploitation—*cont.*

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
SIXTH CIRCLE.															
I. Reserved Forests.															
Mangalore, North ..	52	..	..	..	52	1	..	..	..	1	..	..	..	..	..
Do. South ..	66	4	..	..	70	..	..	..	..	..	..	..	..	..	..
Wynaad	84	..	..	..	84	12	..	..	..	12	(*a*) 293	..	..	..	293
Nilambur	38	..	..	..	38	65	..	..	..	65	(*b*) 7	..	..	..	7
The Nilgiris	67	..	..	..	67	..	..	..	..	..	..	..	..	..	..
Palghat	* 214	19	..	..	233	..	1	..	..	1	..	..	..	..	..
Total ..	521	23	..	..	544	78	1	..	..	79	300	..	..	..	300
II. Leased Forests.															
Nilambur	273	27	..	..	300	34	..	..	..	34	5	2	..	..	7
III. Reserved Lands—Nil.															
IV. Unreserved Lands.															
Mangalore, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wynaad	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nilambur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

* Timber extracted in Chenat Nair is less than 1,000 c.ft.

(*a*) Represents squared timber extracted and not logs converted.

(*b*) Represents outturn of spokes and felloes and sleepers converted from top ends and also sleepers from inaccessible working circle converted directly after felling.

Outturn (in thousands of cubic feet, solid) of timber and fuel during the year 1930-31 and agency of exploitation—*cont.*

Division.	Miscellaneous.					Total timber.					Fuel.					Total outturn.
	Government. (17)	Purchasers. (18)	Free grantees. (19	Right-holders. (20)	Total. (21)	Government. (22)	Purchasers. (23)	Free grantees. (24)	Right-holders. (25)	Total. (26)	Government. (27)	Purchasers. (28)	Free grantees. (29)	Right-holders. (30)	Total. (31)	(32)
SIXTH CIRCLE—*cont.*																
I. Reserved Forests—cont.																
Mangalore, North ..	..	18	..	..	18	53	18	..	..	71	2	1,005	..	..	1,007	1,078
Do. South ..	..	2	..	..	2	66	6	..	..	72	..	100	..	..	100	172
Wynaad	..	..	..	..	..	389	..	..	..	389	..	..	..	..	..	389
Nilambur	..	..	..	..	..	110	..	..	..	110	..	..	..	..	..	110
The Nilgiris	..	..	..	..	..	67	..	..	..	67	674	68	..	..	742	809
Palghat	..	..	1	..	1	214	20	1	..	235	..	546	..	..	546	781
Total ..	..	20	1	..	21	899	44	1	..	944	676	1,719	..	..	2,395	3,339
II. Leased Forests—cont.																
Nilambur	..	..	..	..	..	312	29	..	..	341	1	12	..	..	13	354
III. Reserved Lands—Nil.																
IV. Unreserved Lands—cont.																
Mangalore, North ..	..	10	..	11	21	..	10	..	11	21	..	63	..	14	77	98
Do. South ..	..	33	..	5	38	..	33	..	5	38	..	18	..	..	18	56
Wynaad	..	10	..	..	10	..	10	..	..	10	..	28	..	..	28	38
Nilambur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Outturn (in thousands of cubic feet, solid) of timber and fuel during the year 1930-31 and agency of exploitation—*cont.*

Division	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
SIXTH CIRCLE—*cont.*															
IV. *Unreserved Lands*—cont.															
The Nilgiris	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palghat	..	13	..	..	13	..	..	..	..	..	..	..	..	..	..
Total ..	..	13	..	..	13	..	..	..	..	..	..	..	..	..	..
Grand Total ..	794	63	..	..	857	112	1	..	..	113	305	2	..	..	307
TOTAL PRESIDENCY.															
Reserves	845	217	18	18	1,098	118	217	13	..	348	362	50	..	..	412
Leased forests ..	277	27	..	..	304	34	..	..	..	34	6	2	..	..	8
Unreserved lands ..	26	442	95	..	563	4	81	..	..	85	..	..	..	..	..
Total ..	1,148	686	113	18	1,965	156	298	13	..	467	368	52	..	..	420

Outturn (in thousands of cubic feet, solid) of timber and fuel during the year 1930-31 and agency of exploitation—*cont.*

Division.	Miscellaneous.					Total timber.					Fuel.					Total outturn.
	Government (17)	Purchasers. (18)	Free grantees. (19)	Right-holders. (20)	Total. (21)	Government. (22)	Purchasers. (23)	Free grantees. (24)	Right-holders. (25)	Total. (26)	Government. (27)	Purchasers. (28)	Free grantees. (29)	Right-holders. (30)	Total. (31)	(32)
SIXTH CIRCLE—*cont.*																
IV. *Unreserved Lands*—cont.																
The Nilgiris	..	..	..	..	..	..	..	..	..	..	..	23	..	..	23	23
Palghat	..	..	1	..	1	..	13	1	..	14	..	76	..	..	76	90
Total ..	..	53	1	16	70	..	66	1	16	83	..	208	..	14	222	305
Grand Total ..	..	73	2	16	91	1,211	139	2	16	1,368	677	1,939	..	14	2,630	3,998
TOTAL PRESIDENCY.																
Reserves	33	113	5	..	151	1,358	597	36	18	2,009	1,103	17,503	112	55	18,773	20,782
Leased Forest ..	..	..	..	..	..	317	29	..	..	346	1	12	..	..	13	359
Unreserved lands ..	2	921	73	16	1,012	32	1,444	168	16	1,660	4	1,683	..	14	1,701	3,361
Total ..	35	1,034	78	16	1,163	1,707	2,070	204	34	4,015 (*a*) + 107 (*b*) + 157	1,108	19,198	112	69	20,487	24,502 (*a*) + 107 (*b*) + 157
										4,279						(*c*) 24,764

(*a*) Added to represent the log equivalent of sawn timber.
(*b*) Do. of square timber.
(*c*) The total outturn excludes the figures for Parlakimedi Malias (i.e., 44 c.ft. of timber and 126 c.ft. of fuel).

NOTE.—

GOVERNMENT AGENCY—Actuals.

PRIVATE AGENCY.—

Forest Department—Based on figures furnished by contractors.

REVENUE DEPARTMENT.—

North and South Mangalore.—Based on taluk accounts and also in the case of fuel by conversion of money value at 10 annas per cart-load of 20 c.ft.

Wynaad.—Money value converted at 6 annas per cubic foot for timber and 8 annas per cart-load of 20 c.ft. for fuel.

The Nilgiris.—Converted from money value at 4 annas per cart-load of 20 c.ft. of fuel.

Palghat.—Converted from money value at 4 annas per cubic foot of timber and 6 pies per cubic foot of fuel.

RIGHT-HOLDERS AND FREE GRANTEES.—Actuals.

ANNUAL FORM No. 36.

Forest Department, Madras Presidency.

Outturn of minor forest produce during the year 1930-31.

Circle.	Description of produce.	Produce removed or utilized.				
		By Government agency.	By purchasers.	By free grantees.	By right-holders.	Total.
		Value.	Value.	Value.	Value.	Value.
First Circle.	*Reserved Forests.*	RS.	RS.	RS.	RS.	RS.
	Bamboos	235	78,635	1,294	..	80,164
	Grazing	..	1,06,827	14,818	187	1,21,832
	Other produce.					
	Grass (hay, thatch, etc.) ..	60	1,111	37	..	1,208
	Tamarind, soapnuts, galnuts, nux-vomica, shekoi, etc.	2,227	2,565	..	..	4,792
	Horns, skins, wax, resin, gum, honey, etc.	..	435	..	..	435
	Tangedu, etc., barks and fibres, sarasaparilla, etc.	1,323	7,905	..	..	9,228
	Date and palmyra leaves, stalks, modugu, etc., leaves.	..	290	..	..	290
	Manure leaves, thorns, etc. ..	..	490	..	..	490
	Stone, gravel, etc.	..	411	..	..	411
	Tree owners' fees	..	..	..	..	..
	Lease of shandies	..	6,528	..	..	6,528
	Miscellaneous	3,470	7,453	..	335	11,258
	Total, other produce ..	7,080	27,188	37	335	34,640
	Total, Reserved Forests ..	7,315	2,12,650	16,149	522	2,36,636
	Reserved Lands.					
	Bamboos	..	54,662	..	..	54,662
	Other produce.					
	Grass (hay, thatch, etc.) ..	..	132	..	..	132
	Tamarind, soapnuts, galnuts, nux-vomica, shekoi, etc.	..	29,530	..	..	29,530
	Horns, resin, skins, wax, gum, honey, etc.	..	162	..	..	162
	Date and palmyra leaves, stalks, etc.	..	491	..	..	491
	Tangedu, etc., barks and fibres, sarasaparilla, etc.	..	54	..	..	54
	Total, other produce ..	..	30,369	..	..	30,369
	Total, Reserved Lands ..	..	85,031	..	..	85,031
	Unreserves.					
	Bamboos	36	6,327	16	..	6,379

Outturn of minor forest produce during the year 1930-31—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
First Circle—*cont.*	*Other produce.*	Rs.	Rs.	Rs.	Rs.	Rs.
	Grass (hay, thatch, etc) ..	16	206	..	..	222
	Tamarind, soapnuts, galnuts, nux-vomica, shekoi, etc.	..	1,689	..	..	1,689
	Horns, skins, wax, resin, gum, honey, etc.	..	50	..	..	50
	Tangedu barks and fibres, sarasaparilla, etc.	4	1,158	..	..	1,162
	Date and palmyra leaves, stalks and modugu, etc., leaves.	..	284	675	..	959
	Stone, gravel, etc.	..	869	..	..	869
	Tree owners fees	..	41,962	..	..	41,962
	Lease of shandies	..	..	..	..	..
	Miscellaneous	..	7,321	1,315	..	8,686
	Total, other produce ..	20	53,539	1,990	..	55,549
	Total, Unreserves ..	56	59,866	2,006	..	61,928
	Abstract.					
	Bamboos	271	1,39,624	1,310	..	1,41,205
	Grazing	..	1,06,827	14,818	187	1,21,832
	Other minor forest produce ..	7,100	1,11,096	2,027	395	1,20,588
	Total ..	7,371	3,57,547	18,155	522	3,83,595
Second Circle.	*Reserves.*					
	Bamboos	233	68,702	388	..	69,323
	Grazing	..	1,47,689	..	3,826	1,51,515
	Fodder grass	..	3,335	..	..	3,335
	Penning fees	..	2,466	..	..	2,466
	Kancha fees	..	570	..	..	570
	Total, grazing fees ..	..	1,54,060	..	3,826	1,57,886
	Minor forest produce.					
	Grass (hay, thatch, etc) ..	87	182	89	..	308
	Tamarind, soapnuts and nux-vomica.	..	3,246	..	..	8,246
	Stone, gravel and earth ..	..	5,462	243	..	5,705
	Date, palmyra and plate leaves..	..	1,125	..	..	1,125
	Manure leaves, bats' dung and thorns.	..	4,052	..	..	4,052
	Tumki leaves	..	4,146	..	..	4,146
	Horns, honey, wax, resin, gums and galnuts.	..	4,140	..	..	4,140
	Tangedu, rela. yepi and seeds..	40	12,702	..	..	12,742
	Miscellaneous including tree-tapping fees and amaroy.	..	2,181	..	..	2,181
	Total of minor forest produce.	127	37,236	282	..	37,645
	Grand total of grazing and minor forest produce of Reserves.	127	1,91,296	282	3,826	1,95,531

Outturn of minor forest produce during the year 1930-31—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
		RS.	RS.	RS.	RS.	RS.
Second Circle—*cont.*	*Unreserves.*					
	Bamboos	..	..	..	..	..
	Minor forest produce.					
	Thatch grass and palmyra leaves.	..	..	166	..	166
	Tamarind, soapnuts and nux-vomica.	..	887	..	..	887
	Stone, gravel and earth ..	..	1,782	..	..	1,782
	Date, palmyra and plate leaves.	..	81	..	..	81
	Manure leaves, bats' dung and thorns.		207	..	..	207
	Tangedu, rela, yepi and seeds ..	..	69,304	..	..	69,304
	Tumki leaves	..	668	..	..	668
	Miscellaneous, including tree-tapping fees.	..	1,23,898	..	..	1,23,898
	Total of minor forest produce of Unreserves.	..	1,96,827	166	..	1,96,993
	Grand total of bamboos of Reserves and Unreserves.	233	68,702	388	..	69,323
	Grand total of grazing and minor forest produce of Reserves and Unreserves.	127	3,88,123	448	3,826	3,92,524
Fourth Circle.	*Reserved Forests.*					
	Bamboos	7	1,13,739	412	..	1,14,158
	Grass and grazing	..	1,84,985	..	..	1,84,985
	Other minor produce.					
	Thatch grass	..	3	..	..	3
	Avaram and konnai bark ..	..	12,139	..	..	12,139
	Date, palmyra, tooki plate, etc., leaves.	..	270	..	..	270
	Manure leaves	1	4,663	..	..	4,664
	Stone, gravel, sand, etc. ..	..	1,370	..	..	1,370
	Soapnuts and galnuts	..	4,145	..	..	4,145
	Lac	308	..	..	..	308
	Miscellaneous	1,048	25,531	11	..	26,590
	Total ..	1,357	48,121	11	..	49,489
	Reserved Lands.					
	Manure leaves	..	685	..	..	685
	Unreserves.					
	Bamboos	..	..	23	..	23
	Grass	..	..	1	..	1

Outturn of minor forest produce during the year 1930-31—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency.	By purchasers.	By free grantees.	By right-holders.	Total.
		Value.	Value.	Value.	Value.	Value.
Fourth Circle—*cont.*	*Other produce.*	Rs.	Rs.	Rs.	Rs.	Rs.
	Avaram, konnai, etc., barks ..	..	5,574	..	..	5,574
	Date, palmyra, tooki plate, etc., leaves.	..	2,150	19	..	2,169
	Manure leaves	..	2,359	..	..	2,359
	Tamarind and nux-vomica ..	..	9,006	..	..	9,006
	Stone gravel, sand, etc. ..	..	1,587	..	..	1,587
	Miscellaneous including tree tapping fees.	..	61,113	1	..	61,114
	Total ..	..	81,789	20	..	81,809
	Leased Forests.—Nil.					
	Abstract.					
	Bamboos	7	1,13,739	435	..	1,14,181
	Grass and grazing	..	1,84,985	1	..	1,84,986
	Other produce	1,357	1,30,595	31	..	1,31,983
	Total ..	1,364	4,29,319	467	..	4,31,150
Fifth Circle.	Bamboos	5	(*a*) 38,158	376	..	38,539
	Grazing	..	1,19,454	15	1,416	1,20,885
	Fodder grass	..	1,212	..	..	1,212
			1,20,666	15	1,416	1,22,097
	Other produce.					
	Grass (thatch, eacham, acha fibre and creeper).	..	279	22	..	301
	Tamarind, galnuts, soapnuts, shekoi, mangoes, cardamoms, jack, etc.	3,516	26,733	..	..	30,249
	Avaram, konnai, vembadam ..	..	9,139	..	..	9,139
	Date leaves, korai grass, kaya leaves, manure leaves, palmyra, etc.	..	7,904	...	611	8,515
	Stones, trees, masses, mud, lime stone, etc.	..	2,582	..	..	2,582
	Deer horns, sambur horns, honey, tusks, wax, etc.	926	26	..	..	952
	Miscellaneous	..	13,216	..	..	13,216
	Total ..	4,442	* 59,879	22	611	64,954
	Unreserved Lands.					
	Bamboos	..	3	..	..	3
	Other produce.					
	Avaram, konnai, amaroy ..	..	5,020	..	..	5,020
	Sivoi-jama tree tax, fees on trees, stones, etc.	..	5,950	..	..	5,950
	Usufructs of trees, palmyras, tamarind, etc.	..	11,232	..	..	11,232

(*a*) Rs. 1,700 relates to Mount Stuart Working Circle.

* Includes Rs. 357 relating to the Nilgiris, Rs. 25 to Wynaad and Re. 1 to South Mangalore.

Outturn of minor forest produce during the year 1930-31—*cont.*

Circle.	Description of produce.	Produce removed or utilized.				
		By Government agency.	By purchasers.	By free grantees.	By right-holders.	Total.
		Value.	Value.	Value.	Value.	Value.
		RS.	RS.	RS.	RS.	RS.
Fifth Circle—*cont.*	*Other produce*—cont.					
	Kaya leaves, korai and grass ..	..	5,976	..	..	5,976
	Miscellaneous	..	8,005	..	..	8,005
	Total ..	..	36,183	..	..	36,183
	Abstract.					
	Bamboos	5	38,161	376	..	38,542
	Grazing and fodder grass ..	..	1,20,666	15	1,416	1,22,097
	Other produce	4,442	96,062	22	611	1,01,137
	Total ..	4,447	2,54,889	413	2,027	2,61,776
Sixth Circle.	*Reserved Forests.*					
	Bamboos	8,860	18,076	115	..	27,051
	Grazing and fodder grass ..	214	29,501	182	..	29,897
	Other produce.					
	Stones, gravel, etc.	..	1,364	21	..	1,385
	Canes	13	684	..	..	697
	Wood oil	..	511	..	..	511
	Coconuts	..	3,286	..	..	3,286
	Hopea bark	3,502	..	..	..	3,502
	Dhupa fruits	..	1,100	..	..	1,100
	Other items, including tusks, etc.	1,337	17,072	..	..	18,409
	Total ..	4,852	24,017	21	..	28,890
	Total, Reserves ..	13,926	71,594	318	..	85,838
	Reserved Lands.					
	Bamboos	7	102	3	..	112
	Grazing and fodder grass ..	..	..	399	..	399
	Total, Reserved Lands ..	7	102	402	..	511
	Leased Forests.					
	Bamboos	2,348	..	..	..	2,348
	Other minor produce	17	215	..	..	232
	Total, Leased Forests ..	2,365	215	..	..	2,580
	Unreserved Lands.					
	Bamboos	..	38	..	..	38

Outturn of minor forest produce during the year 1930-31—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
	Other produce.	Rs.	Rs.	Rs.	Rs.	Rs.
Sixth Circle—*cont.*	Stones, gravel, etc.	..	779	..	..	779
	Other items	..	6,392	..	..	6,392
	Total, Unreserved Lands	..	7,209	..	..	7,209
	Abstract.					
	Bamboos	11,215	18,216	118	..	29,549
	Grazing and fodder grass	214	29,501	581	..	30,296
	Other produce	4,869	31,403	21	..	36,293
	Grand total	16,298	79,120	720	..	96,138
Parlakimedi Maliahs.	Bamboos	10	3,221	113	104	3,448
	Grazing	..	1,456	..	..	1,456
	Other produce	235	19,758	25	58	20,076
	Total	245	24,435	138	162	24,980
Total, Presidency.	*Reserved Forests.*					
	Bamboos	9,340	3,17,310	2,585	..	3,29,235
	Grazing	..	5,66,752	44,334	5,611	6,16,697
	Other produce	17,858	1,96,441	373	946	2,15,618
	Reserved Lands.					
	Bamboos	10	57,890	215	107	58,222
	Grazing	..	1,456	399	..	1,855
	Other produce	235	50,812	25	58	51,130
	Unreserved Lands.					
	Bamboos	36	6,368	39	..	6,443
	Grazing	..	..	1	..	1
	Other produce	20	3,75,509	2,176	..	3,77,705
Grand total, Presidency.	Bamboos	9,386	3,81,568	2,839	107	3,93,900
	Grazing	..	5,68,208	44,734	5,611	6,18,553
	Other produce	18,113	6,22,762	2,574	1,004	6,44,453
	Total	27,499	15,72,538	50,147	6,722	16,56,906

Annual Form No. 37.

Forest Department, Madras Presidency.

Account of timber, fuel, bamboos and minor produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1930-31.

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
TIMBER (IN THOUSANDS OF CUBIC FEET).					
First Circle.					
Ganjam	31	131	162	(*a*) 114 (*b*) 1 (*c*) 11	36
Vizagapatam	..	11	11	(*a*) 11	..
Godavari, Upper	57	50	107	(*a*) 18 (*b*) 5	84
Do. Lower	1	3	4	(*a*) 1	3
Guntur	..	2	2	(*b*) 2	..
Nellore	1	..	1	(*b*) 1	..
Total ..	90	197	287	164	123
Second Circle.					
Anantapur	..	..	..	..	..
Kurnool, East	..	4	4	(*a*) 2 (*b*) 1	1
Do. South	1	34	35	(*a*) 32	3
Do. West	4	4	8	(*a*) 5 (*c*) 1	2
Cuddapah, North	1	..	1	(*a*) ¾ (*b*) ¼	..
Do. South	..	3	3	(*a*) 3	..
Total ..	6	45	51	45	6
Fourth Circle.					
Chittoor	..	2	2	2	..
Vellore	1	(*a*) 20	21	(*b*) 10	11
Salem, North	1	9	10	9	1
Do. Central	..	2	2	2	..
Do. South	1	1	2	1	1
Total ..	3	34	37	24	13

Note for the First Circle.—(*a*) Sold departmentally. (*b*) Used departmentally. (*c*) Written off.
Note for the Second Circle.—(*a*) Sold departmentally. (*b*) Used departmentally. (*c*) Written off.
Note for the Fourth Circle.—(*a*) Includes 9,000 cubic feet of sandalwood from other divisions.
(*b*) Nine thousand cubic feet sold and 1,000 cubic feet deficit.
Note.—Timber includes sandalwood.

Account of timber, fuel, bamboos and minor produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1930-31—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
TIMBER (IN THOUSANDS OF CUBIC FEET)—*cont.*					
Fifth Circle.					
Kollegal	..	(*f*) 11	11	11	..
Coimbatore, North ..	2	(*f*) 21	23	20	3
Do. South—					
Non-commercial area ..	14	24	38	26	12
Commercial	82 (*a*) + 25	245	352	221	131
Valparai (scantlings) ..	..	2	2	2	..
Madura	1	1	2	1	1
Tinnevelly	5	6	11	8	3
Total ..	129	310	439	289	150
SLEEPERS (IN NUMBER).					
Coimbatore, South—					
Valparai, B.G.	3,660	10,850	14 510	13,306	1,204
Do. M.G.	..	4,968	4,968	4,251	717
TIMBER (IN THOUSANDS OF CUBIC FEET).					
Sixth Circle.					
Mangalore, North	55	53	108	(*a*) 53 (*b*) 2 (*d*) 2	51
Do. South	(*f*) 145	66	211	(*a*) 101 (*b*) 6 (*c*) 2 (*e*) 19	83
Forest Utilization Officer (logs).	5	..	5	(*a*) 5	..
Forest Utilization (sawn timber)	53	19	72	(*a*) 47	25
Total, Mangalore, South ..	203	85	288	180	108
Wynaad	(*f*) 188	433	621	(*a*) 130 (*b*) 13 (*c*) 27 (*e*) 24	427
Forest Utilization Officer (logs).	3	23	26	(*a*) 9 (*h*) 17	..
Forest Utilization Officer (sawn timber).	23	5	28	(*a*) 19	9
Total, Wynaad ..	214	461	675	239	436
Nilambur	508	422	930	(*a*) 534	396
Forest Utilization Officer (logs).	114	315	429	(*a*) 157 (*h*) 272	..
Forest Utilization Officer (sawn timber).	23	5	28	12	16
Total, Nilambur ..	645	742	1,387	975	412

Note for the Fifth Circle.—(*a*) Represents opening balance in respect of Pollachi timber sale depot taken over by the district. (*f*) Includes sandalwood 2 quarters being equal to 1 cubic foot.

Note for the Sixth Circle.—(*a*) Sales. (*b*) Used departmentally. (*c*) Written off. (*d*) Supplied as specimen to Dehra Dun. (*e*) Delivered to the Forest Utilization Officer. (*f*) Difference in the closing stock of last year, now corrected. (*h*) Stock transferred to the respective division by the Forest Utilization Officer.

Account of timber, fuel, bamboos and minor produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1930-31—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
TIMBER (IN THOUSANDS OF CUBIC FEET)—*cont.*					
Sixth Circle—cont.					
The Nilgiris	25	67	92	(a) 15	77
Palghat	8	106	114	79	35
Forest Utilization Officer (sawn timber).	1	..	1	..	1
Forest Engineer (sawn timber).	(g) 13	..	13	13	..
Total, Palghat ..	22	106	128	92	36
Total, Sixth circle ..	1,164	1,514	2,678	1,558	1,120
Parlakimedi Maliahs ..	..	5	5	4	1
Grand total, Presidency ..	1,392	2,105	3,497	2,084	1,413
FUEL (IN THOUSANDS OF CUBIC FEET).					
First Circle.					
Ganjam	5	34	39	(a) 38	1
Godavari, Upper	..	4	4	(a) 3 (b) 1	..
Do. Lower	17	29	46	(a) 22	24
Guntur	2	12	14	(a) 8	6
Nellore	..	1	1	(a) 1	..
Total ..	24	80	104	73	31
Second Circle.					
Anantapur	6	3	9	(a) 8	1
Kurnool, East	..	..	..	..	..
Do. South	3	33	36	(a) 13	23
Do. West	86	11	97	(a) 94	3
Cuddapah, North	39	32	71	(a) 50	21
Do. South	3	101	104	(a) 98	6
Total ..	137	180	317	263	54
Fourth Circle.					
Chittoor	10	21	31	17	14
Vellore	44	27	71	52	19
Salem, North	..	6	6	2	4
Do. Central	..	12	12	..	12
Do South..	7	9	16	7	9
Total ..	61	75	136	78	58

Note for the Sixth Circle.—(a) Sales. (g) Correct figures furnished by the Forest Engineer.
Note for the First Circle.—(a) Sold departmentally. (b) Used departmentally.
Note for the Second Circle.—(a) Sold departmentally

Account of timber, fuel, bamboos and minor produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1930–31—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
FUEL (IN THOUSANDS OF CUBIC FEET)—*cont.*					
Fifth Circle.					
Coimbatore, North	..	22	22	22	..
Do. South	..	20	20	9	11
Madura	1	53	54	48	6
Tinnevelly	7	..	7	7	(*b*) ..
Total	8	95	103	86	17
Sixth Circle.					
Mangalore, North	24	1	25	(*i*) 16 (*j*) 8	1
Nilambur	38	1	39	39	..
The Nilgiris	189	674	863	514	349
Total	251	676	927	577	350
Parlakimedi Maliahs	29	71	100	44	56
Grand total, Presidency	510	1,177	1,687	1,121	566
BAMBOOS (IN NUMBER).					
First Circle.					
Ganjam	..	4,149	4,149	(*b*) 4,149	..
Vizagapatam	..	917	917	(*b*) 767	150
Godavari, Upper	..	13,315	13,315	(*b*) 11,215	2,100
Do. Lower	..	990	990	(*a*) 990	..
Nellore	..	7	7	(*b*) 7	..
Total	..	19,378	19,378	17,128	2,250
Second Circle.					
Anantapur	..	..	..	..	..
Kurnool, East	..	14,415	14,415	(*a*) 13,405 (*b*) 1,010	..
Kurnool, South	..	5,350	5,350	(*b*) 5,350	..
Kurnool, West	654	110	764	(*a*) 654 (*b*) 110	..
Cuddapah, North	..	1,695	1,695	(*b*) 1,695	..
Cuddapah, South	..	450	450	(*b*) 450	..
Total	654	22,020	22,674	22,674	..
Fourth Circle.					
Vellore	..	100	100	100	..
Salem, North	..	230	230	230	..
Salem, South	..	285	285	..	285
Total	..	615	615	330	285

Note for the Fifth Circle.—(*b*) Four hundred and sixty cubic feet which is less than 1,000 cubic feet has been shown as Nil.

Note for the Sixth Circle.—(*i*) Sold. (*j*) Written off.

Note for the First Circle.—(*a*) Sold departmentally. (*b*) Used departmentally.

Note for the Second Circle—(*a*) Sold departmentally. (*b*) Used departmentally.

Account of timber, fuel, bamboos and minor produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1930–31—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
BAMBOOS (IN NUMBER)—*cont.*					
Fifth Circle.					
Coimbatore, North	..	1,448	1,448	1,448	..
Sixth Circle.					
Mangalore, South	..	9,049	9,049	(*k*) 9,049	..
Wynaad	1,156	15,677	16,833	(*i*) 215 (*k*) 16,618	..
Nilambur	7,765	1,36,037	1,43,802	1,35,483	8,319
Palghat	23	7,995	8,018	3,075	4,943
Total	8,944	1,68,758	1,77,702	1,64,440	13,262
Parlakimedi Maliahs	400	200	600	600	..
Grand total, Presidency	9,998	2,12,419	2,22,417	2,06,620	15,797
MINOR FOREST PRODUCE (IN QUARTERS OF 28 LB.)					
First Circle.					
Ganjam	..	2,720	2,720	(*b*) 2,720	..
Vizagapatam	86	96	182	(*a*) 96 (*c*) 5	81
Godavari, Upper	750	3,436	4,186	(*a*) 29 (*b*) 3,682 (*c*) 102	373
Do. Lower	29	94	123	(*b*) 51	72
Guntur	33	87	120	(*a*) 105	15
Nellore	290	14,262	14,552	(*a*) 4,635 (*b*) 267 (*c*) 364	9,286
Total	1,188	20,695	21,883	12,056	9,827
Second Circle.					
Anantapur	15	95	110	(*b*) 55 (*c*) 1	54
Kurnool, East	38	3,295	3,333	(*b*) 3,307	26
Do. South	134	394	528	(*b*) 358	170
Do. West	..	..	..	..	..
Cuddapah, North	261	881	1,142	(*a*) 4 (*b*) 573	565
Do. South	188	656	844	(*b*) 796	48
Total	636	5,321	5,957	5,094	863

Note for the Sixth Circle.—(*i*) Sold departmentally. (*k*) Used departmentally.
Note for the First and Second Circles.—(*a*) Sold departmentally. (*b*) Used departmentally. (*c*) Written off.

Account of timber, fuel, bamboos and minor produce cut or collected by Government Agency and brought to depot, sold locally or otherwise disposed of during 1930-31—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
MINOR FOREST PRODUCE (IN QUARTERS OF 28 LB.)—*cont.*					
Second Circle—cont.					
Chittoor	2	485	487	215	272
Vellore	93	491	584	185	399
Salem, North	99	377	476	109	367
Do. Central	3	20	23	..	23
Do. South	5	260	265	28	237
Total ..	202	1,633	1,835	537	1,298
Fifth Circle.					
Coimbatore, North ..	(*c*) 28	(*d*) 4,246	4,274	1,430	2,844
Do. South ..	79	(*e*) 54	133	91	42
Total ..	107	4,300	4,407	1,521	2,886
Sixth Circle.					
Mangalore, North	720	1,448	2,168	(*i*) 2,160	8
Do. South	(*l*) 1,069	84	1,153	(*i*) 619 (*j*) 534	..
Wynaad	..	1	1	(*i*) 1	..
The Nilgiris	51	179	230	(*i*) 220	10
Total ..	1,840	1,712	3,552	3,534	18
Parlakimedi Maliahs ..	6	14	20	6	14
Grand total, Presidency ..	3,979	33,675	37,654	22,748	14,906

Note for the Fifth Circle.—(*c*) Correct opening balance.
(*d*) Includes seeds one measure being equal to 1 lb.
(*e*) Includes seeds one bag being equal to 2 quarters.
Note for the Sixth Circle.—(*i*) Sold. (*j*) Written off. (*l*) Correct figure adopted.

ANNUAL FORM No. 38.

Forest Department, Madras Presidency.

Statement showing the value of timber and other produce at sale depots for the year 1930–31.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	First Circle.			RS.			RS.	RS.	RS.
Vizagapatam.	Timber ..	1	12	16	4	67	17	1	..
Nellore ..	..	..	465	80	..	..	..	..	80
	Total timber ..	..	477	96	..	67	17	..	79
Nellore ..	Fuel	..	40	1	..	230	4	3	..
			QRS.			QRS.			
Vizaga-patam.	Minor forest produce.	..	86	59	..	81	32	..	27
Nellore ..	Do.	..	262	295	..	9,317	4,266	3,971	..
	Total minor forest produce.	..	348	354	..	9,398	4,298	3,944	..
	Grand, total ..	..	..	451	..	..	4,319	3,868	..
	Second Circle.								
Kurnool, South.	Timber ..	..	1,882	2,356	..	3,112	3,077	721	..
	Total ..	..	1,882	2,356	..	3,112	3,077	721	..
Kurnool, South.	Fuel	..	3,691	37	..	23,137	402	365	..
Cuddapah, South.	Fuel	..	2,460	41	..	..	..	..	41
	Total ..	..	6,151	78	..	23,137	402	365	41
	Grand, total ..	..	..	2,434	..	..	3,479	1,045	..
	Fourth Circle.								
Chittoor ..	Timber ..	..	76	9	24	45	4	..	5
	Fuel	..	10,091	946	..	13,732	1,287	341	..
Vellore ..	Timber ..	..	..	..	..	10,315	2,03,811	2,03,811	..
	Minor forest produce.	..	..	..	..	QRS. 275	138	138	..
Salem, North.	Timber ..	..	609	2,494	..	988	3,650	1,156	..
	Fuel	..	..	..	..	4,000	105	105	..
	Minor forest produce.	..	QRS. 99	479	..	QRS. 367	692	213	..
Salem, Central.	Timber ..	..	22	579	..	41	533	..	46
	Fuel	..	..	..	..	12,313	548	548	..
	Minor forest produce.	..	QRS. 3	11	..	QRS. 20	70	59	..

Statement showing the value of timber and other produce at sale depots for the year 1930-31—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	Fourth Circle—cont.			RS.			RS.	RS.	RS.
Salem, South.	Timber	..	1,246	3,253	..	714	1,320	..	1,933
	Fuel	..	6,570	122	..	8,880	162	40	..
	Bamboos	..	..	..	285	..	30	30	..
	Minor forest produce.	..	QRS. 5	4	..	QRS. 237	162	158	..
	Total	..	..	7,897	..	..	212,512	204,615	..
	Fifth Circle.								
Coimbatore, North.	Timber	..	213	107	..	..	..	..	107
	Sandalwood	..	1,658	46,424	..	2,809	56,180	9,756	..
	Sambur and deer horns.	QRS. 28	..	72	QRS. 29	..	119	47	..
	Gallnuts	..	..	..	2,813	..	3,516	3,516	..
Coimbatore, South.	Timber	..	30,802	38,132	..	49,247	56,182	18,050	..
	Spokes and felloes.	SETS. 354	..	5,753	STS. 12	..	1,372	..	4,381
Madura ..	Timber	..	272	95	..	270	95	..	
	Brake-poles	NO. 131	..	33	NO. 304	..	76	43	..
	Sandalwood	..	..	..	..	(*a*)..	10	10	..
	Fuel	..	561	70	..	6,055	757	687	..
	Charcoal	..	16	16	..	44	35	19	..
	Seeds	..	..	..	MES. 547	..	27	27	..
	Lac	..	..	..	LB. 26	..	14	14	..
Tinnevelly.	Timber	..	5,102	5,740	..	3,516	4,611	..	1,129
	Sandalwood	..	19	595	..	30	825	230	..
	Fuel	..	7,110	1,777	..	460	36	..	1,741
Abstract ..	Timber	..	36,389	44,074	..	53,033	60,888	16,814	..
	Brakepoles	131	..	33	304	..	76	43	..
	Sandalwood	..	1,677	47,019	..	2,839	57,015	9,996	..
	Spokes and felloes.	STS. 354	..	5,753	STS. 12	..	1,372	..	4,381
	Fuel	..	7,671	1,847	..	6,515	793	..	1,054
	Charcoal	..	16	16	..	44	35	19	..
	Sambur and deer horns.	QRS. 28	..	72	QRS. 29	..	119	47	..

(*a*) 20 lb. of sandalwood which is less than 1 qr has been shown as nil.

Statement showing the value of timber and other produce at sale depots for the year 1930-31—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	Fifth Circle—cont.			Rs.			Rs.	Rs.	Rs.
Abstract.	Gallnuts ..	..	..	..	2,813 MRS.	..	3,516	3,516	..
	Seeds	..	..	..	547 LB.	..	27	27	..
	Lac	..	..	..	26	..	14	14	..
	Total ..	..	..	98,814	..	..	1,23,855	25,041	..
	Sixth Circle.								
Mangalore, North.	Timber ..	..	29,550	23,899	..	32,536	30,442	6,543	..
Mangalore, South.	Do. ..	..	13,138	13,684	..	28,292	34,878	21,194	..
Forest Utilization division.	Sawn Timber..	..	52,715	1,05,400	..	24,574	30,400	..	75,000
	Total, Mangalore, South.	..	65,853	1,19,084		52,866	65,278	..	53,806
Wynaad .. Forest Utilization division.	Timber ..	..	12,910	36,238	..	153,223	2,87,864	2,51,626	..
	Sawn Timber..	..	22,580	54,500	..	9,466	15,400	..	39,100
	Total, Wynaad.	..	35,490	90,738	..	162,689	3,03,264	2,12,526	..
Nilambur ..	Timber .	..	*1,37,627	† 90,667	..	171,042	93,731	3,064	..
Palghat ..	Forest Utilization Officer, Sawn Timber.	..	1,344	2,350	..	1,344	‡ 1,277	..	1,073
	Forest Engineer, Logs.	..	411	194	..	..	..	..	194
	Forest Engineer, Sleepers		6,098	7,121	..	..	..	..	7,121
	Total, Palghat.	..	7,853	9,665	..	1,344	1,277	..	8,388
	Total, Sixth Circle.	..	276,373	3,34,053	..	420,477	493,992	2,22,133	62,194
Mangalore, North.	Minor produce (Hopea bark).	..	TONS. 4½	439	..	..	..	..	439

Note.—(1) The stock shown in South Coimbatore relates to Pollachi depot which was taken over by the District during the year.

(2) Factor of conversion: Sandalwood 2 qrs. = 1 c.ft. Charcoal 40 lb. = 1 c.ft.

* Correct figure adopted. † Value revised with reference to the Audit report for 1929-30.

‡ Revised value adopted by the Forest Utilization Officer.

Statement showing the value of timber and other produce at sale depots for the year 1930-31—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	Sixth Circle —cont.			Rs.			Rs.	..	
Parlakimedi Malahs.	Timber ..	124	246	372	356	1,230	1,727	1,355	..
	Fuel ..	292	29,200	1,168	564	56,400	2,256	1,088	..
	Bamboos ..	400	..	7	..	..	..	..	7
	Minor forest produce.	..	Cns. 6	170	..	14	538	373	5
Total, Presidency.	Timber ..	..	..	4,40,091	..	..	8,27,482	3,87,391	..
	Fuel ..	..	..	4,178	..	..	5,592	1,414	..
	Bamboos ..	..	..	7	..	..	30	23	..
	Minor forest produce.	..	..	1,529	..	..	9,574	8,045	..
Grand Total, Presidency.	..	..	..	4,45,805	..	..	8,42,678	3,96,873	..

ANNUAL FORM No. 39.

Forest Department, Madras Presidency.

Summary of Revenue of the different districts—1930-31.

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godavari Upper.	Godavari Lower.	Guntur.	Nellore.	Total.	Parlakimedi Maliahs.	Golgonda Agency.	Grand total.
FIRST CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
VIII. Forest Receipts.											
Timber and other produce removed by Government Agency—											
Timber ..	..	23,963	12,357	2,938	522	8	12	39,800	3,869	3,559	47,228
Firewood and charcoal.	91	1,416	..	119	1,995	429	28	4,078	1,768	..	5,846
Bamboos ..	..	52	..	..	..	..	..	52	10	..	62
Other minor forest produce.	(a) 5,405	52	49	..	..	..	1,620	7,126	235	..	7,361
Forest Department—											
Timber ..	..	1,722	31	4,204	15,108	658	..	21,723	7,517	610	29,850
Firewood ..	(a) 40,330	27,916	6,025	693	49,009	55,019	37,487	2,16,479	4,925	..	2,21,404
Bamboos ..	..	6,857	17,831	16,498	91,143	6,913	..	1,39,242	3,221	..	1,42,463
Grazing ..	..	9,148	2,371	8,272	17,784	47,523	21,739	1,06,837	1,456	273	1,08,566
Other minor forest produce.	215	2,015	6,278	3,959	36,968	5,331	6,095	60,861	19,758	800	81,419
Revenue Department—											
Timber ..	..	11,395	1,048	..	7,217	1,828	1,733	23,221	..	..	23,221
Firewood ..	..	3,490	1,300	..	1,445	8,887	1,666	16,788	..	..	16,788
Bamboos ..	..	135	..	..	..	..	..	135	..	..	135
Other minor forest produce.	..	3,975	2,043	..	23,644	15,923	6,297	51,882	..	..	51,882

(a) Relates to Nellore.

Summary of revenue of the different districts, 1930-31—*cont.*

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godavari Upper.	Godavari Lower.	Guntur.	Nellore.	Total.	Parlakimedi Maliahs.	Golgonda Agency.	Grand total.
FIRST CIRCLE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
VIII. Forest Receipts—cont.											
Drift and waif-wood.	..	970	40	1,007	3,030	132	331	5,510	42	..	5,552
Fines and forfeitures.	(*a*) 40	357	455	15	2,924	516	685	4,922	124	12	5,128
Rents of buildings.	..	1,471	386	1,580	1,229	400	854	5,920	175	68	6,163
Other sources.	(*b*) 150	5,582	3,487	1,460	8,293	13,485	9,028	41,485	1,381	78	42,944
Total ..	46,231	1,00,516	53,701	40,745	2,60,311	1,57,052	87,575	7,46,131	44,481	5,400	7,96,012
Deduct—Refunds ..	..	1,999	106	112	2,481	— 41	752	5,409	..	1	5,410
Net total ..	46,231	98,517	53,595	40,633	2,57,830	1,57,093	86,823	7,40,722	44,481	5,399	7,90,602

(*a*) Relates to Nellore.

(*b*) Out of Rs. 150, Rs. 6 relates to Lower Godavari.

Summary of revenue of the different districts, 1930–31—*cont.*

Budget heads.	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
SECOND CIRCLE.								
VIII. Forest Receipts.								
(*a*) Timber and other produce removed from forests by Government Agency—		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Other produce—								
Timber	..	126	1,200	13,442	2,630	22	4,750	22,170
Firewood and charcoal	..	302	..	70	1,343	123	103	1,941
Bamboos	..	..	145	2	..	..	..	147
Total (*a*) ..	..	428	1,345	13,514	3,973	145	4,853	24,258
(*b*) Timber and other produce removed from the forests by consumers or purchasers—								
Forest Department—								
Timber	..	1,159	1,162	11,997	4,127	3,029	3,229	24,703
Firewood and charcoal	..	4,771	2,219	7,844	12,640	19,956	1,23,953	1,71,383
Bamboos	..	425	3,300	38,175	15,460	5,945	4,925	68,230
Grazing and fodder grass	..	23,829	29,337	19,699	34,598	27,689	15,103	1,50,255
Other minor produce	..	7,393	4,734	3,149	17,508	3,953	3,430	40,167
Total, Forest Department ..	..	37,577	40,752	80,864	84,333	60,572	1,50,640	4,54,738
Revenue Department—								
Timber	..	16,204	368	957	3,589	147	396	21,661
Firewood and charcoal	..	4,877	278	1,10,	2,677	659	333	9,929
Other minor produce	..	1,43,426	5,294	4,783	33,045	4,040	4,666	1,95,254
Total, Revenue Department ..	..	1,64,507	5,940	6,845	39,311	4,846	5,395	2,26,844
Total (*b*) ..	..	2,02,084	46,692	87,709	1,23,644	65,418	1,56,035	6,81,582
(*c*) Drift and waifwood and confiscated forest produce ..	..	109	69	722	729	123	628	2,380

Summary of revenue of the different districts, 1930-31—*cont.*

Budget heads.	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah North.	Cuddapah South.	Total.
SECOND CIRCLE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.
VIII. Forest Receipts—cont.								
(*c*) Miscellaneous—								
Fines and forfeitures	..	776	58	2,757	983	662	420	5,656
Rents of buildings	..	411	1,260	2,644	2,364	1,433	1,213	9,315
Other sources	70	17,693	3,993	10,016	13,407	5,371	6,320	56,870
Total (*c*) ..	70	18,880	5,311	15,417	16,744	7,466	7,953	71,841
Total ..	70	2,21,501	53,417	1,17,362	1,45,090	73,152	1,69,469	7,80,061
(*b*) *Deduct*—Refunds—Voted—								
Refunds by Forest officers	..	430	15	362	65	203	347	1,422
Grand total ..	70	2,21,071	53,402	1,17,000	1,45,025	72,949	1,69,122	7,78,639

NOTE.—This return excludes the revenue of Rs. 771 realized in IV Circle on account of sale of sandalwood, as it will be included in the return of IV Circle.

Summary of revenue of the different districts, 1930-31—*cont.*

Budget heads.	Direction.	Research.	Working Plans, Mount Stuart.	Working Plans, Mangalore.	Total.
THIRD (WORKING PLANS) CIRCLE.	Rs.	Rs.	Rs.	Rs.	Rs.
VIII. Forest Receipts.					
(*a*) Timber and other produce removed from forests by Government Agency—					
Other produce—					
Timber	..	3	..	..	3
(*c*) Miscellaneous—					
Fines and forfeitures ..	..	1	..	..	1
Rents of buildings	456	124	288	2	867
Other sources	158	6	283	1	447
Total (*c*) ..	614	127	574	3	1,318
Total ..	614	130	574	3	1,318
(*h*) *Deduct*—Refunds—Voted—					
Refunds by forest officers ..	9	..	..	..	9
Grand total ..	605	130	574	3	1,309

Summary of revenue of the different districts, 1930-31—*cont.*

Budget heads.	Direction.	Chittoor.	Vellore.	North Salem.	Central Salem.	South Salem.	Total.
FOURTH CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
VIII. Forest Receipts.							
(*a*) Timber and other produce removed from forests by Government Agency—							
Sandalwood	* 2,535	348	78,742	78,544	6,127	8,233	† 1,74,529
Other produce—							
Timber	..	3,953	86	385	9	182	4,615
Firewood and charcoal	..	114	1,064	25	12	178	1,393
Bamboos	..	..	5	..	..	..	5
Other minor produce	..	..	112	..	..	7	119
Total ..	..	..	..	..	..	..	..
Total (*a*) ..	2,535	4,415	80,609	78,954	6,148	8,600	1,80,661
(*b*) Timber and other produce removed from the forests by consumers or purchasers—							
Forest Department—							
Timber	..	301	465	22	1,001	..	1,789
Firewood and charcoal	..	12,387	26,745	5,224	25,132	2,964	72,452
Bamboos	..	15,245	71,909	5,937	15,220	5,516	1,13,827
Grazing and fodder grass	..	24,303	45,712	29,374	61,666	23,060	1,84,115
Other minor produce	..	7,090	18,948	7,683	8,380	14,850	56,951
Total, Forest Department ..	..	59,326	1,63,779	48,240	1,11,399	46,390	4,29,134
Revenue Department—							
Timber	..	4,620	19,540	4,972	11,048	25,631	65,811
Firewood and charcoal	..	2,037	29,772	1,414	5,316	4,911	43,450
Bamboos	..	..	3	..	..	..	3
Other minor produce	..	9,651	28,755	10,614	12,571	15,128	76,719
Total, Revenue Department ..	..	16,308	78,070	17,000	28,935	45,670	1,85,983
Total (*b*) ..	..	75,634	2,41,849	65,240	1,40,334	92,060	6,15,117

* Sandalwood revenue relating to other circles—

	RS.
Tinnevelly	1,764
Anantapur	661
South Cuddapah ..	110
Total ..	2,535

† Rs. 2,055 realized during 1931-32 and apportioned by the District Forest Officers, Vellore, excluded to tally with audited figures.

Summary of revenue of the different districts, 1930-31—*cont.*

Budget heads.	Direction.	Chittoor.	Vellore.	North Salem.	Central Salem.	South Salem.	Total.
FOURTH CIRCLE—*cont.*							
VIII. Forest Receipts—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(*c*) Drift and waifwood and confiscated forest produce	..	94	104	168	195	147	708
(*e*) Miscellaneous—							
Fines and forfeitures	..	566	1,294	395	370	1,239	3,864
Rents of buildings	..	2,418	3,007	930	1,402	335	8,092
Other sources	..	7,758	24,597	7,537	22,959	12,333	75,184
Total (*e*) ..	2,535	10,742	28,898	8,862	24,731	13,907	87,140
Total ..	2,535	90,885	3,50,860	1,53,224	1,71,408	1,14,714	8,83,626
(*h*) *Deduct*—Refunds—Voted—							
Refunds by forest officers	..	174	7,028	242	1,478	— 189	8,733
Grand Total ..	2,535	90,711	3,43,832	1,52,982	1,69,930	1,14,903	8,74,893

Summary of revenue of the different districts, 1930–31—*cont.*

Budget heads.	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
FIFTH CIRCLE.								
VIII. Forest Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Timber and other produce removed from the forests by Government Agency—								
Sandalwood	45,792	..	1,95,324	2	..	..	..	(*a*)2,41,118
Other produce—								
Timber	..	51	634	1,67,721	839	8,697	..	1,77,942
Firewood and charcoal	..	..	..	120	722	4	..	846
Other minor produce	..	..	268	585	..	..	..	853
Timber and other produce removed from the forests by consumers or purchasers—								
Forest Department—								
Timber	..	3,437	1,049	724	1,214	30	9	6,463
Firewood and charcoal	..	3,917	24,588	15,716	91,630	90,391	480	2,26,722
Bamboos	..	6,146	17,435	7,995	2,957	1,920	..	36,453
Grazing and fodder grass	..	45,614	37,483	4,634	24,478	8,426	336	1,20,971
Other minor produce	..	5,133	(*b*) 7,938	6,704	28,468	13,468	2,865	64,576
Revenue Department—								
Timber	..	2,091	5,075	2,210	8,963	295	196	18,830
Firewood and charcoal	..	175	2,684	2,972	9,722	13,646	3,372	32,571
Bamboos	..	..	..	..	3	..	28	31
Other minor produce	..	1,391	2,441	2,254	16,472	13,359	3,365	39,282
Drift and waifwood and confiscated forest produce	..	34	164	47	344	294	8	891
Profits from Government commercial undertakings—								
Mount Stuart	..	..	..	38,464	..	..	..	38,464
Miscellaneous—								
Fines and forfeitures	..	43	537	79	748	797	..	2,204
Rents of buildings	..	1,076	935	922	2,111	1,338	3	6,384
Other sources	23	5,279	13,316	5,566	21,913	9,936	5,323	61,356
Recoveries of indirect charges from Government commercial undertakings—								
Mount Stuart Forests	..	..	..	6,544	..	..	..	6,544

(*a*) The amount is distributed as follows :—It excludes Rs. 1,763 realized in IV Circle on account of Tinnevelly.

	RS.		RS.
Kollegal	1,40,175	The Nilgiris	1,670
Coimbatore, North	98,791	Madras Forest College	480
Coimbatore, South	2		

(*b*) Includes Rs. 354 relating to the Nilgiris.

Summary of revenue of the different districts, 1930-31—*cont.*

Budget heads.	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
FIFTH CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
VIII. Forest Receipts—cont.								
Recoveries of investments in Government Commercial undertakings—								
Mount Stuart Forests	..	..	..	68	..	..	..	68
Total ..	45,815	74,387	3,09,870	2,63,327	2,10,584	1,62,601	15,985	10,82,569
Deduct—Refunds—Voted—								
Refunds by forest officers	..	23	2,118	2,360	1,697	90	+ 1,101	5,187
Net Total ..	45,815	74,364	3,07,752	2,60,967	2,08,887	1,62,511	17,086	10,77,382

Summary of revenue of the different districts, 1930-31—*cont.*

Budget heads.	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
SIXTH CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
VIII. Forest Receipts.								
(*a*) Timber and other produce removed from forests by Government Agency—								
Sandalwood	..	6,000	3,500	..	12,195	..	..	21,695
Other produce—								
Timber	..	36,983	1,39,859	3,44,998	17,148	1,36,080	..	6,75,068
Firewood and charcoal	..	..	6	..	30,333	285	..	30,624
Bamboos	..	..	..	6	..	576	..	582
Other minor produce	1,144	2,358	41	29	851	..	..	4,423
Total	1,144	39,341	1,39,906	3,45,033	48,332	1,36,941	..	7,10,697
Total (*a*)	1,144	45,341	1,43,406	3,45,033	60,527	1,36,941	..	7,32,392
(*b*) Timber and other produce removed from the forests by consumers or purchasers—								
Forest Department—								
Timber	..	113	383	73	81	..	..	650
Firewood and charcoal	..	13,226	2,581	3	4,782	58,334	..	78,926
Bamboos	..	21	381	922	1,701	15,152	2	18,179
Grazing and fodder grass	..	5,294	10,114	3,897	5,742	4,453	..	29,500
Other minor produce	..	1,799	2,532	5,224	2,845	6,825	522	19,747
Total, Forest Department	..	20,453	15,991	10,119	15,151	84,764	524	1,47,002
Revenue Department—								
Timber	..	5,182	8,619	3,744	212	3,338	..	21,095
Firewood and charcoal	..	6,028	2,149	709	298	2,371	..	11,555
Bamboos	..	2	36	..	..	..	..	38
Other minor produce	..	1,120	1,666	1,024	56	3,303	..	7,169
Total, Revenue Department	..	12,332	12,470	5,477	566	9,012	..	39,857
Total (*b*)	..	32,785	28,461	15,596	15,717	93,776	524	1,86,859

Summary of revenue of the different districts, 1930-31—*cont.*

Budget heads.	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris	Palghat.	Nilambur.	Total.
SIXTH CIRCLE—*cont.*								
VIII. Forest Receipts—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(*c*) Drift and waifwood and confiscated forest produce.	..	306	747	33	17	147	..	1,250
(*d*) Profits from Government commercial undertakings.	..	..	..	..	..	..	1,21,189	1,21,189
Total (*d*) ..	..	..	..	..	..	..	1,21,189	1,21,189
(*e*) Miscellaneous—								
Fines and forfeitures	..	27	146	408	191	699	..	1,471
Forest College	..	..	..	..	..	..	..	..
Rents of buildings	931	2,088	1,366	3,263	2,169	1,721	624	12,162
Other sources	314	6,370	8,270	7,349	19,664	7,446	1,284	50,697
Total (*e*) ..	1,245	8,485	9,782	11,020	22,024	9,866	1,908	64,330
Total ..	2,389	86,917	1,82,396	3,71,682	98,285	2,40,730	1,23,621	11,06,020
(*h*) *Deduct*—Refunds—Voted—								
Refunds by forest officers	2	84	975	445	904	751	..	3,161
Grand Total ..	2,387	86,833	1,81,421	3,71,237	97,381	2,39,979	1,23,621	11,02,859

Details of Revenue collected outside the circle—

	Rs.
V. Circle—Sandalwood	1,670
Minor Forest Produce (Ivory)	336
Minor Forest produce	350
Chenat Nair Concern	13,200
Forest Engineer (Saw Mills)	2,301
Beypore Tope	2,693
Total ..	20,550

Summary of revenue of the different districts, 1930-31—*cont.*

Budget heads.	Chief Forest Engineer.	Forest Utilization Officer.	Forest Engineer.	Total.
ENGINEERING BRANCH.	Rs.	Rs.	Rs.	Rs.
VIII. Forest Receipts.				
(*a*) Timber and other produce removed from the forest by Government Agency—				
Timber	..	394	2,294	2,688
(*b*) Timber and other produce removed by consumers or purchasers—				
Forest Department				
Other minor produce	..	2,220	..	2,220
Recoveries of investments in Government Commercial undertakings ..	..	..	2,500	2,500
(*c*) Miscellaneous—				
Fines and forfeitures	..	201	..	201
Rents of buildings	..	48	..	48
Other sources	6	1,533	61,319	62,858
Grand Total ..	6	4,396	66,113	70,515
(*b*) *Deduct*—Refunds—Voted	10	116	61,230	61,356
Net Total ..	— 4	4,280	4,883	9,159

Summary of expenditure of the different districts for the year 1930-31.

Account heads (major and minor and sub-heads and units of appropriation).	Direction.	Ganjam.	Vizagapatam.	Godavri, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total.	Parlakimedi Maliahs.	Golgonda Agency.	Total.	Grand total.
FIRST CIRCLE.												
8. *b. Conservancy and Works*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Forest produce removed by Government agency—Voted—												
Timber	..	7,854	3,751	5,980	668	..	6	18,259	847	2,286	..	21,392
Other produce—												
1. Firewood and charcoal ..	..	..	..	89	14	132	..	235	467	..	..	702
2. Minor forest produce	..	..	..	..	40	..	8,884	8,924	80	..	..	9,004
Total ..	..	7,854	3,751	6,069	722	132	8,890	27,418	1,394	2,286	..	31,098
II. Timber and other produce removed by consumers, etc.	..	9,099	2,968	6,914	11,661	12,654	5,875	49,171	1,987	590	..	51,748
III. Maintenance, repairs and renewals—												
(*a*) Feed and upkeep of cattle ..	..	..	..	2,435	755	..	38	3,228	..	..	..	3,228
(*b*) Renewals or replacements of stores, etc.	..	331	44	869	1,479	1,213	2,841	6,777	178	..	..	6,955
Roads and bridges ..	..	3,018	766	677	1,537	1,895	1,297	9,190	..	..	..	9,190
Buildings	..	14,074	1,329	2,680	1,854	881	2,521	23,339	352	206	..	23,897
Rates and taxes	..	95	78	..	179	112	10	474	..	..	..	474
Other works	..	251	..	139	..	48	75	513	99	..	..	612
Total ..	..	17,769	2,217	6,800	5,804	4,149	6,782	43,521	629	206	..	44,356
IV. Conservancy and regeneration—												
Maintenance of boundaries ..	..	..	..	490	1,014	274	50	1,828	..	440	..	2,268
Forest surveys—												
(*a*) Regeneration	284	..	92	3,526	590	165	67	4,724	68	338	..	5,130
(*b*) Fire protection	..	6,670	416	4,512	2,168	..	300	14,066	592	69	..	14,727
(*c*) Other works	..	5,662	150	2	149	394	310	6,667	..	23	..	6,690

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total.	Parlakimedi Maliahs.	Golgonda Agency.	Total.	Grand total.
FIRST CIRCLE—*cont.*												
8. *b. Conservancy and Works*—cont.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
V. Miscellaneous—												
Non-voted—												
Rates and Taxes	..	..	3	..	162	..	..	165	..	..	..	165
Voted—(Law charges) ..	..	..	..	..	..	2	..	2	..	..	..	2
Drift and waifwood	..	8	..	62	14	11	..	95	..	..	..	95
Honoraria—Voted	..	..	..	..	16	129	..	145	..	..	..	145
Supplies and service miscellaneous.	..	..	..	2	..	..	..	2	..	..	..	2
Rent of leased forests	..	..	525	..	4,465	..	..	4,990	..	..	..	4,990
VI. Suspense—Works Advances ..	..	40	..	..	..	..	..	40	..	..	..	40
Total ..	284	47,102	10,122	28,377	26,765	17,910	22,274	1,52,834	4,670	3,952	..	1,61,456
8. *c. Establishments.*												
Pay of officers—Non-voted	25,771	16,447	1,087	1,411	10,395	900	10,800	66,811	..	..	..	66,811
Pay of officers—Voted	..	13,625	8,450	17,646	8,333	7,940	..	55,994	7,850	..	7,850	63,844
Pay of establishments—												
Permanent	8,503	52,868	18,415	42,083	44,359	34,800	28,170	2,29,198	17,170	2,042	19,212	2,48,410
Temporary	..	2,454	888	2,997	1,311	.	..	7,650	1,016	1,956	2,972	10,622
Cost of passages granted under the Superior Civil Services.	2,979	..	..	..	..	..	..	2,979	..	..	..	2,979
Allowances—Non-voted—												
Travelling allowances	4,004	3,589	..	734	2,150	356	1,939	12,772	..	..	..	12,772
Allowances—Voted—												
Travelling allowances	1,435	10,528	4,141	9,230	7,143	4,881	4,386	41,744	4,709	748	5,457	47,201

Summary of expenditure of the different districts for the year 1930–31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total.	Parlakimedi Maliahs.	Golgonda Agency.	Total.	Grand total.
FIRST CIRCLE—*cont.*												
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. *o. Establishments*—cont.												
Allowances—Voted—*cont.*												
Fixed travelling allowances	..	2,498	944	2,451	2,756	1,784	782	11,215	692	195	887	12,102
Other compensatory	..	1,109	347	826	853	612	471	4,218	244	70	314	4,532
Non-voted rates and taxes	1,447	126	918	..	413	502	437	3,843	4	96	100	3,943
Rents	819	728	2,046	..	1,658	1,301	880	7,432	588	277	865	8,297
Telephone charges	..	..	..	..	150	..	..	150	..	..	..	150
Books and periodicals	4	2	..	2	2	2	2	14	2	..	2	16
Miscellaneous	2,065	3,595	1,374	2,600	3,070	2,150	1,986	16,840	1,704	299	2,003	18,843
Apparatus and materials	35	448	87	240	105	56	65	1,036	50	..	50	1,086
Charges payable to Government, Departments and others	..	870	295	..	..	412	..	1,577	3,048	..	3,048	4,625
Grand Total ..	47,062	1,08,887	38,992	80,220	82,698	55,696	49,918	4,63,473	37,077	5,683	42,760	5,06,233
52-*A. Capital outlay on Forests.*												
Forest surveys	..	810	..	..	2,112	..	..	2,922	..	58	..	2,980
Demarcation	..	1,021	..	832	3,043	..	205	5,101	..	105	..	5,206
Sowing and planting	..	..	..	..	2,111	1,583	1,709	5,403	..	..	..	5,403
Other Works	..	..	..	..	..	..	..	..	..	..	..	..
Roads and bridges—												
Works in progress	..	797	202	599	4,826	..	100	6,524	..	..	..	6,524
New works	..	3,199	1,043	508	..	..	..	4,750	..	..	..	4,750
Buildings—												
Works in progress	..	..	451	1,574	1,551	..	..	3,576	..	..	..	3,576
New works	..	1,640	35	60	1,726	185	219	3,865	10	23	..	3,898

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total	Parlakimedi Maliahs.	Golconda Agency.	Total.	Grand total.
FIRST CIRCLE—*cont.*												
52—A. Capital outlay on Forests—cont.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs
Other Works—												
Works in progress	..	..	..	310	..	..	..	310	..	..	..	310
New works	..	..	212	..	24	..	57	293	..	..	..	293
Purchase of stores and tools, etc. ..	..	174	189	41	93	240	..	737	..	..	..	737
Total ..	..	7,641	2,132	3,924	15,486	2,008	2,290	33,481	10	186	..	33,677

Summary of expenditure of the different districts for the year 1930–31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
SECOND CIRCLE.								
8. *b. Conservancy and Works.*								
I. Forest produce removed by Government agency—Voted—								
Timber	..	..	1,233	5,115	1,476	..	1,503	9,327
Other produce—								
1. Firewood and charcoal	..	30	..	..	77	46	..	153
2. Bamboos	..	..	77	..	..	..	..	77
3. Sandalwood	..	188	..	..	..	..	30	218
Total, I ..	..	218	1,310	5,115	1,553	46	1,533	9,775
II. Timber and other produce removed from the Forests by Conservators and purchasers.	..	8,024	6,375	7,308	7,613	9,180	11,957	50,457
III. Maintenance, repairs and renewals—								
(*a*) Feed and keep of cattle	..	20	..	..	2,134	..	..	2,154
(*b*) Renewal and replacement of stores, tools and plant.	..	51	109	87	301	269	72	889
Total, II ..	..	71	109	87	2,435	269	72	3,043
(*c*) Communications and buildings—								
Roads and bridges	..	374	1,729	880	612	629	1,786	6,010
Buildings	..	1,810	1,233	1,676	1,601	1,508	1,774	9,602
Rates and taxes—(Non-voted) ..	..	107	18	242	234	102	153	856
Other works	..	4	20	44	14	21	9	112
Total, III ..	..	2,295	3,000	2,842	2,461	2,260	3,722	16,580

Summary of expenditure of the different districts for the year 1930–31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
SECOND CIRCLE—*cont.*								
8. *b. Conservancy and Works*—cont.								
IV. Conservancy and regeneration—								
1. Maintenance of boundaries	..	30	177	84	179	29	20	519
2. Forest Surveys	..	..	600	..	..	..	..	600
3. Regeneration	..	170	97	146	747	949	38	2,147
4. Fire protection	..	199	828	467	1,510	247	757	4,008
5. Other works	..	38	73	..	52	77	163	403
Total, IV ..	..	437	1,775	697	2,488	1,302	978	7,677
V. Miscellaneous—								
Honoraria—Voted—	..	370	95	..	..	..	15	480
Non-Voted—Rates and taxes	..	..	..	..	..	..	6	6
Law charges	..	..	..	..	..	..	1	1
Drift and waifwood and confiscated produce ..	..	15	4	60	75	1	7	162
Supplies and Services—(Voted) Miscellaneous.	..	130	158	..	8	10	..	306
Total, V ..	..	515	257	60	83	11	29	955
VI. Suspense—Works Advances—								
Voted	..	..	..	..	—62	..	..	—62
Total ..	..	11,560	12,826	16,109	16,571	13,068	18,291	88,425
Non-voted ..	..	107	18	242	234	102	159	862
Voted ..	..	11,453	12,808	15,867	16,337	12,966	18,132	87,563
Total ..	..	11,560	12,826	16,109	16,571	13,068	18,291	88,425

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
SECOND CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
8. *c. Establishments.*								
Pay of officers—Non-voted—								
Pay excluding passage pay	42,325	8,164	..	13,449	16,719	8,105	8,242	97,004
Pay of officers—Voted	..	5,585	8,812	..	4,302	425	2,067	21,191
Pay of establishments—Voted—								
1. Permanent	9,628	32,928	29,814	38,648	44,084	32,732	40,073	2,27,907
2. Temporary	..	275	851	634	1,538	708	288	4,294
Total of Pay of establishment ..	9,628	33,203	30,665	39,282	45,622	33,440	40,361	2,32,201
Allowances—Non-voted—								
Travelling allowance	1,885	1,885	..	2,480	2,704	1,738	1,101	11,793
Allowances—Voted—								
1. Travelling allowance	1,231	4,407	6,709	5,766	6,309	3,755	4,070	32,247
2. Fixed travelling allowance	..	1,125	1,700	2,090	2,132	1,420	1,738	10,205
3. Other compensatory	..	779	900	518	1,222	750	1,031	5,200
Total of allowances—Voted ..	1,231	6,311	9,309	8,374	9,663	5,925	6,839	47,652
Contingencies—Non-voted—								
Rates and taxes	796	293	28	90	48	219	85	1,559
Non-contract contingencies—Voted—								
1. Rents	1,738	1,894	420	616	1,116	596	1,131	7,511
2. Books and periodicals	27	2	2	2	8	2	..	43
3. Miscellaneous	3,175	2,341	2,786	2,498	2,243	2,333	2,099	17,475
Total ..	5,736	4,530	3,236	3,206	3,415	3,150	3,315	26,588
Charges payable to Governments, departments and others.	1,647	151	..	..	..	..	327	2,125

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West	Cuddapah, North.	Cuddapah, South.	Total.
SECOND CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
8. *c. Establishments*—cont.								
Supplies and Services—General—								
Apparatus and materials	..	48	628	176	153	125	173	1,303
Total ..	62,452	59,877	52,650	66,967	82,578	52,908	62,808	4,40,240
Non-voted ..	45,006	10,342	28	16,019	19,471	10,062	9,811	1,10,739
Voted ..	17,446	49,535	52,622	50,948	63,107	42,846	52,997	3,29,501
52-A. b. Conservancy and Works.								
(*c*) Communications and buildings—								
Roads and bridges—								
Works in progress	..	..	..	..	7,078	..	..	7,078
New works	..	..	..	..	..	1,344	714	2,058
Buildings—								
Works in progress	..	2,206	1,469	..	117	..	1,449	5,241
New works	..	..	547	1,447	..	3,178	271	5,443
Other works—								
Works in progress	..	..	..	..	..	445	..	445
New works	..	..	541	..	55	..	..	596
Total ..	..	2,206	2,557	1,447	7,250	4,967	2,434	20,861
(*e*) Live-stock, stores, tools and plant—								
Purchase of stores, tools and plant ..	..	48	..	53	..	..	17	118
Total ..	..	2,254	2,557	1,500	7,250	4,967	2,451	20,979

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Research.	Working Plans Division.					Total.
			Mount Stuart.	Mangalore.	Ganjam.	North Coimbatore.	Wynaad.	
	Rs.	Rs.						Rs.
III (Working Plans) Circle.								
8. *b. Conservancy and Works.*								
Forest produce removed by Government Agency—								
Voted—								
Timber	47	..	..	..	..	..	..	47
III. Maintenance, repairs and renewals—								
Renewals, replacements of stores and tools and plant.	..	172	..	..	..	..	..	172
Communications and buildings—								
Buildings	..	412	..	..	..	..	..	412
Total ..	47	584	..	..	..	..	..	631
IV. Conservancy and Regeneration—								
(*e*) Regeneration	..	129	..	..	..	..	..	129
Voted ..	..	713	..	..	..	..	..	713
Total ..	..	713	..	..		..	..	713
8. *c. Establishments.*								
Pay of officers—Non-voted—								
1. Pay excluding passage pay	..	16,182	..	..	..	..	..	16,182
Pay of establishments—Voted—								
1. Permanent	..	6,609	..	..	..	..	..	6,609

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Research.	Working Plans Division.					Total.
			Mount Stuart.	Mangalore.	Ganjam.	North Coimbatore.	Wynaad.	
III (Working Plans) Circle—*cont.*	Rs.	Rs.	Rs.					Rs.
8. *c. Establishments*—cont.								
Allowances—Non-Voted—								
Travelling allowance	..	3,511	..	..	..	..	..	3,511
Allowances—Voted—								
1. Travelling allowance	..	2,530	..	..	..	..	..	2,530
2. Fixed Travelling allowance	..	263	..	..	..	..	..	263
3. Other compensatory	..	694	..	..	..	..	..	694
Total ..	..	6,998	..	..	..	..	..	6,998
Contingencies—Non-voted—								
Rates and Taxes	..	92	..	..	..	..	..	92
Contingencies—Voted—								
1. Rents	..	79	..	..	..	..	..	79
2. Books and periodicals	..	74	..	..	..	..	..	74
3. Miscellaneous	..	888	..	..	..	..	..	888
Total ..	..	1,133	..	..	..	..	..	1,133
Supplies and Services—General—								
1. Apparatus and materials	..	60	..	..	..	..	..	60
2. Miscellaneous	..	6,588	..	..	..	..	..	6,588
Total ..	..	6,648	..	..	..	..	..	6,648
Grand Total ..	..	37,570	..	..	..	..	..	37,570
52-A. *Capital Outlay on Forests.*								
(*c*) Live-stock, stores and tools and plant—Voted—								
Purchase of stores and tools and plant	466	..	2	..	..	..	..	468

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Research.	Working Plans Division.					Total.
			Mount Stuart.	Mangalore.	Ganjam.	North Coimbatore	Wynaad.	
III (Working Plans) Circle—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
52-*A. Capital Outlay on Forests*—cont.								
(*b*) Organization, improvement and extension of forests—Voted—								
Working plans	5,728	..	2,325	1,530	440	2,829	2,075	14,927
Grand Total ..	6,194	..	2,327	1,530	440	2,829	2,075	15,395
Regeneration.								
52-*A. f. Establishments.*								
Pay of officers—Non-voted—								
Pay excluding passage pay	25,890	..	8,899	9,696	9,027	9,164	8,989	71,575
Pay of officers—Voted	14,988	..	..	8,911	..	..	..	23,899
Pay of establishments—Voted—								
1. Permanent	9,269	9	7,907	7,592	5,117	7,761	2,745	40,400
2. Temporary	3,289	..	6,281	385	123	1,446	201	11,725
Total ..	27,546	9	14,188	16,888	5,240	9,207	2,946	76,024
Allowances—Non-voted—								
1. Travelling allowance	4,842	..	1,384	2,847	2,202	3,384	2,850	17,509
Allowances—Voted—								
1. Travelling allowance	6,501	..	2,627	6,679	1,959	4,560	1,679	24,005
2. Fixed travelling allowance	959	..	3,033	626	42	1,173	395	6,228
3. Other compensatory	1,264	1	2,620	165	236	182	99	4,567
Total ..	13,566	1	9,664	10,317	4,439	9,299	5,023	52,309

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation)	Direction.	Research.	Working Plans Division.					Total.
			Mount Stuart.	Mangalore.	Ganjam.	North Coimbatore.	Wynaad.	
III (Working Plans) Circle—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Regeneration—*cont.*								
52. A. f. Establishments—cont.								
Contingencies—Voted—								
1. Rents	386	..	..	51	..	..	..	437
2. Books and Periodicals	40	..	..	..	..	..	..	40
3. Miscellaneous	2,673	..	320	433	357	600	197	4,580
Total ..	3,099	..	320	484	357	600	197	5,057
Supplies and Services—General—								
1. Apparatus and materials	502	..	..	..	..	..	..	502
2. Miscellaneous	1,165	..	..	..	4	..	..	1,169
Total ..	1,667	..	..		4	..		1,671
Grand Total ..	71,678	10	33,071	37,385	19,068	28,274	17,155	2,06,636
Add 52-A. Working Plans and Stores ..	6,194	..	2,327	1,530	440	2,829	2,075	15,395
Total ..	77,872	10	35,398	38,915	19,503	31,103	19,230	2,22,031

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Chittoor.	Vellore.	North Salem.	Central Salem.	South Salem.	Total.
FOURTH CIRCLE.							
8. *b. Conservancy, Maintenance and Regeneration.*		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Forest produce removed by Government Agency—							
Voted—							
Timber	..	824	19	576	..	..	1,419
Other produce—							
1. Sandalwood	..	241	17,453	17,592	2,209	3,319	40,814
2. Grass and other minor produce	..	..	59	..	16	..	75
Total ..	..	1,065	17,531	18,168	2,225	3,319	42,308
II. Timber and other produce removed from the forests by consumers and purchasers	..	10,886	13,291	6,296	12,186	6,686	49,345
III. Maintenance, repairs and renewals—							
Feed and keep of cattle	..	30	8	..		..	38
Renewals or replacement of stores and tools and plant	..	85	115	58	154	120	532
Total ..	..	115	123	58	154	120	570
IV. Communications and buildings—							
Roads and bridges	..	3,414	5,113	3,852	1,990	2,114	16,483
Buildings	..	2,516	4,381	1,600	2,881	1,641	13,019
Rates and taxes—Non-voted	..	251	368	45	80	41	785
Other works	..	584	70	10	19	94	777
Total ..	..	6,765	9,932	5,507	4,970	3,890	31,064
V. Conservancy and regeneration—							
1. Maintenance of boundaries	..	102	137	130	913	..	1,282
2. Regeneration	..	2,553	1,263	984	1,285	764	6,849
3. Fire protection	..	499	1,885	673	1,462	1,177	5,696
4. Other works	..	21	26	..	30	..	77
Total ..	..	3,175	3,311	1,787	3,690	1,941	13,904

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Chittoor.	Vellore.	North Salem.	Central Salem.	South Salem.	Total.
FOURTH CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.
8. *b. Conservancy, maintenance and regeneration.*							
V. Miscellaneous—							
Rates and taxes—Non-voted	..	..	3	..	..	..	3
Law charges	..	19	1	1	..	5	26
Drift and waifwood and confiscated forest produce	..	..	9	3	..	23	35
Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	..	46	..	..	46
Honoraria—Voted	..	20	20	..	92	57	189
Supplies and Services—General—Miscellaneous	..	..	..	2,941	22	80	3,043
Total ..	..	39	33	2,991	114	165	3,342
VI. Suspense—Works Advance—Voted	..	..	75	..	..	..	75
Non-voted ..	..	251	371	45	80	41	788
Voted ..	..	21,794	43,925	34,762	23,259	16,080	1,39,820
Grand Total ..	..	22,045	44,296	34,807	23,339	16,121	1,40,608
8. *c. Establishments.*							
Pay of Officers—Non-voted	25,800	14,382	24,693	10,400	1,913	..	77,188
Total ..	25,800	14,382	24,693	10,400	1,913	..	77,188
Pay of Officers—Voted	..	..	11,451	3,052	6,949	12,998	34,450
Pay of Establishments—Voted—							
1. Permanent	10,625	40,049	57,386	40,394	43,355	31,970	2,23,779
2. Temporary	..	788	2,316	3,157	1,084	1,466	8,811
Total ..	10,625	40,837	71,153	46,603	51,388	46,434	2,67,040

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Chittoor.	Vellore.	North Salem.	Central Salem.	South Salem.	Total.
FOURTH CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.
8. *c. Establishments*—cont.							
Allowances—Non-voted—							
Travelling allowance	2,617	1,777	4,590	2,198	322	..	11,504
Cost of passage	..	..	..	1,260	..	..	1,260
Allowances—Voted—							
1. Travelling allowance	859	3,856	5,748	6,616	4,509	5,973	27,561
2. Fixed travelling allowance	..	1,863	3,206	2,130	1,771	1,673	10,643
3. Other Compensatory	..	511	628	1,002	714	611	3,466
Total	859	6,230	9,582	9,748	6,994	8,257	41,670
Contingencies—Non-voted—							
Rates and taxes	..	20	469	..	8	15	512
Contingencies—Voted—							
1. Rents	2,880	284	2,292	624	537	170	6,787
2. Books and periodicals	..	..	2	2	..	..	4
3. Miscellaneous	1,192	2,047	3,739	2,804	2,506	2,625	14,913
Total	4,072	2,351	6,502	3,430	3,051	2,810	22,216
Charges payable to Governments, departments and others.	1,975	..	153	303	646	295	3,372
Supplies and Services—General—							
Apparatus and Materials	28	66	1	68	99	228	490
Total	45,975	65,643	1,16,674	74,010	64,413	58,024	4,24,739
Non-voted	28,416	16,179	29,752	13,858	2,248	15	90,464
Voted	17,559	49,464	86,922	60,152	62,170	58,009	3,34,275

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Chittoor.	Vellore.	North Salem.	Central Salem.	South Salem.	Total.
FOURTH CIRCLE—*cont.*		Rs.	Rs.	Rs	Rs.	Rs.	Rs.
8. *c. ii—Research.*							
Charges payable to Governments, departments, and others.	..	..	..	14,646	..	..	14,646
Total ..	..	..	..	14,646	..	..	14,646
Grand Total ..	..	..	..	..	..	..	..
52-A—Capital Outlay.							
(*a*) Forest surveys	..	..	..	..	560	1,020	1,580
(*b*) Organization, improvement and extension of forests—							
Demarcation	..	..	..	124	253	1,721	2,098
Sowing and planting	..	..	..	..	..	..	..
Other works	..	12	162	..	..	..	174
Total ..	..	12	162	124	253	1,721	2,272
(*c*) Communications and buildings—							
Roads and bridges—							
Works in progress	..	..	152	..	..	..	152
New works	..	224	2,432	4,143	808	800	8,407
Buildings—							
Works in progress	..	..	574	..	..	26	600
New works	..	94	5,402	2,445	370	1,713	10,024
Other works—							
Works in progress	..	..	812	163	..	..	975
New works	..	294	276	144	..	50	764
Total ..	..	612	9,648	6,895	1,178	2,589	20,922
(*e*) Livestock, stores, tools and plant—							
Purchase of stores, tools and plant	..	960	1,061	902	896	699	4,518
Total ..	..	..	..	..	..	..	..
Grand Total ..	..	1,584	10,871	7,921	2,887	6,029	29,292

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
FIFTH CIRCLE.	RS.	RS	RS.	RS.	RS.	RS	RS.	RS.
8. *b. Conservancy, Maintenance and Regeneration.*								
Forest produce removed by Government agency—								
Timber	..	..	146	85,675	398	5,950	..	92,169
Firewood and charcoal	..	..	351	164	1,017	..	..	1,532
Sandalwood	1,027	14,731	16,994	..	93	346	..	33,191
Grass and other minor produce	..	..	2,285	64	..	..	..	2,349
Timber, and other produce removed from the forest by consumers and purchasers.	..	10,353	10,720	2,929	13,524	6,890	417	44,833
Maintenance, repairs and renewals—						..		
Feed and up keep of cattle	..	..	10	13,834	..	..	..	13,844
Renewals or replacements of stores, tools and plant.	..	26	87	317	78	294	..	802
Communications and buildings—		..						
Roads and bridges	..	7,631	7,813	4,670	11,216	4,500	..	35,730
Buildings	..	2,286	2,381	3,166	2,514	3,597	120	14,064
Other works	..	44	66	1,453	78	123	..	1,764
Rates and taxes—Non-voted	..	76	53	50	126	78	..	383
Conservancy and regeneration—								
Maintenance of boundaries	..	..	..	219	..	3	..	222
Regeneration	..	232	150	13,049	364	301	..	14,096
Fire protection	..	713	1,878	1,549	3,556	439	..	8,135
Other works	..	329	1,000	1,782	331	236	82	3,760
Miscellaneous—							..	
Rates and taxes—Non-voted	..	..	..	..	238	..	..	238
Drift and waifwood and confiscated forest produce.	..	26	..	..	..	..	..	26
Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	..	2,500	..	..	..	2,500
Honoraria—Voted	..	..	48	..	..	..	..	48
Supplies and services—Voted—Miscellaneous	..	..	497	54	29	359	..	939
Suspense—Works—Advances—Voted	..	..	599	— 79	..	— 127	..	393
Total	1,027	36,347	45,078	1,31,396	33,562	22,989	619	2,71,018

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
FIFTH CIRCLE—*cont.*								
8. *c. District Establishments.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Pay of officers—Non-voted	25,936	10,400	9,957	24,076	15,763	7,770	..	93,832
Pay of officers—Voted	1,411	..	3,850	1,791	2,640	..	..	9,692
Pay of establishment—Voted—								
Permanent	10,261	33,919	39,541	34,077	47,292	36,418	1,101	2,02,609
Temporary	23	368	731	1,986	1,054	629	..	4,791
Allowances—Non-voted—								
Travelling allowances	3,748	3,230	3,030	5,669	3,512	1,638	..	20,827
Cost of passages granted under the Superior Civil Services Rules, 1924.	5,314	..	..	..	..	..	..	5,314
Allowances—Voted—								
Travelling allowances	2,215	5,329	6,774	5,760	6,515	4,412	122	31,127
Fixed travelling allowances	..	1,987	1,951	1,601	2,368	835	114	8,856
Other compensatory	1	544	671	601	1,486	160	..	3,463
Contingencies—Non-voted—							..	
Rates and taxes	335	45	719	365	112	79	..	1,655
Contingencies—Voted—								
Rents	1,193	1,118	1,386	865	764	690	..	6,016
Telephone charges	..	..	..	548	..	..	..	548
Books and periodicals	42	..	2	3	1	..	..	48
Miscellaneous	2,232	2,401	2,179	1,874	2,738	2,190	50	13,664
Charges payable to Governments, departments and others.	..	108	923	807	28	100	..	1,966
Supplies and services—Voted—								
Apparatus and materials	..	70	117	468	59	111	..	825
Total	52,711	59,519	71,831	80,491	84,332	54,962	1,387	4,05,233
5 2*A. Capital Outlay on Forests.*								
Organization, improvement and extension of forests—								
Demarcation	..	318	562	..	1,670		..	2,550
Sowing and planting	..	..	..	6,221	..	2,640	..	8,861
Protection from fire	..	..	..	1,609	..	..	..	1,609
Other works	..	160	..	336	868	..	..	1,354

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
FIFTH CIRCLE—*cont.*								
52-A. Capital Outlay on Forests—cont.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Communications and buildings—								
Roads and bridges—								
Works in progress	..	..	..	2,925	334	..	..	3,259
New works	..	1,903	..	6,586	493	1,627	..	10,609
Buildings—								
Works in progress	..	..	..	176	..	..	..	176
New works	..	8,992	1,785	2,688	1,690	..	..	15,155
Other works—								
Works in progress	..	..	..	..	..	..	..	..
New works	..	15	437	— 60	489	..	..	881
Livestock, stores, tools and plant—								
Purchase of live-stock	..	..	..	17,452	..	..	..	17,452
Purchase of stores, tool and plant	..	291	306	82	432	1,555	96	2,762
Investments in Government Commercial undertakings.								
Mount Stuart Forests	..	..	..	— 46,449	..	..	..	— 46,449
Total	..	11,679	3,090	— 8,434	5,976	5,822	96	18,229
Deduct—Receipts and recoveries on capital accounts.								
Mount Stuart Forests	..	..	..	17,580	..	..	..	17,580
Net Total	..	11,679	3,090	— 26,014	5,976	5,822	96	649

Summary of expenditure of the different districts for the year 1930-31—*cont.*

8. *Forest—Exploitation—V Circle*—1930-31.

Account head.	Direction.	Circle total.
	RS	RS.
Pay of officers—Voted	449	449
Total ...	449	449

8. *d. Losses on Government Commercial undertakings—Voted.*

Account head.	South Coimbatore.	Circle total.
	RS.	RS.
8. *d.* Losses on Government Commercial undertakings—Voted—		
Mount Stuart Forests ...	3,704	3,704
Total ...	3,704	3,704

52-*A. Forest—Establishments—V Circle*—1930-31.

Account head.	South Coimbatore.	Circle total.
	RS.	RS.
Pay of establishments—Voted.		
Permanent	4,066	4,066
Temporary	592	592
Allowances—Voted—		
Travelling allowances ...	613	613
Fixed travelling allowances.	444	444
Other compensatory ...	77	77
Contingencies—Voted—		
Telephone charges	409	409
Supplies and services—Voted—		
Apparatus and materials ...	161	161
Total ...	6,362	6,362

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor, sub-heads and units of appropriation).	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
SIXTH CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
8. *b. Conservancy, Maintenance and Regeneration.*								
I. Forest produce removed by Government Agency—Voted—								
Timber	..	25,771	51,127	1,97,119	9,379	1,13,726	..	3,97,122
Firewood and charcoal	..	..	..	..	18,007	..	..	18,007
Bamboos	..	..	..	..	..	705	..	705
Sandalwood	..	1,000	663	..	2,098	..	..	3,761
Grass and other minor produce	..	1,386	188	2	564	..	..	2,140
Total (I)	..	28,157	51,978	1,97,121	30,048	1,14,431	..	4,21,735
II. Forest produce removed by private agency—Voted	..	1,300	1,192	2,280	624	5,489	270	11,155
III. Maintenance, repairs and renewals—								
Feed and keep of livestock	3	5,075	11,221	34,436	7,028	6,908	..	64,671
Renewals and replacement of stores and tools and plant	..	632	880	3,077	716	518	..	5,823
Communications and buildings—								
Roads and bridges	..	920	1,156	12,058	2,388	3,238	965	20,725
Buildings	192	1,123	1,066	2,417	3,249	3,046	3,153	14,246
Other works	..	62	23	1,161	35	231	40	1,552
Buildings—Rates and taxes (non-voted)	..	..	139	..	477	86	..	702
Total (III)	195	7,812	14,485	53,149	13,893	14,027	4,158	1,07,719
IV. Conservancy and regeneration—								
Maintenance of boundaries	..	25	103	437	1,145	145	..	1,855
Regeneration	..	2,300	3,377	16,912	4,283	5,679	22,277	54,828
Protection from fire	..	2,108	1,914	1,555	2,919	2,711	3,762	14,969

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor, sub-heads and units of appropriation).	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
SIXTH CIRCLE—*cont.*								
8. *b. Conservancy, Maintenance and Regeneration*—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
IV. Conservancy and Regeneration—*cont.*								
Other works	..	40	628	2	591	283	218	1,762
Total IV ..	..	4,473	6,022	18,906	8,938	8,818	26,257	73,414
V. Miscellaneous—								
Rates and taxes—Non-voted ..	..	..	..	56	1,880	51	..	1,987
Drift and waifwood and forest produce	..	7	10	14	..	6	..	37
Grants-in-aid—Nilgiris Game Association	..	..	..	..	4,833	..	..	4,833
Supplies and Services—General—								
Miscellaneous	..	21	44	1,029	2	149	..	1,245
Honoraria (voted)	..	41	35	..	..	..	..	76
Total V ..	..	69	89	1,099	6,715	206	..	8,178
VI. Suspense—Works Advance	..	..	444	396	..	262	..	214
Grand Total ..	195	41,811	73,322	2,72,951	60,218	1,43,233	30,685	6,22,415
Non-voted ..	..	..	139	56	2,357	137	..	2,689
Voted ..	195	41,811	73,183	2,72,895	57,861	1,43,096	30,685	6,19,726
8. *c. Establishments.*								
Pay of Officers—Non-voted—								
Pay excluding passage pay ..	28,122	5,999	7,220	18,692	10,934	6,875	8,228	86,070
Pay of Officers—Voted	4,968	2,099	5,797	12,010	427	10,141	7,361	42,803
Pay of Establishments—Voted—								
Permanent	14,875	36,660	29,569	52,992	38,957	36,015	21,175	2,30,243
Temporary	144	432	1,443	1,379	1,239	1,136	3,434	9,207
Total ..	19,987	39,191	36,809	66,381	40,623	47,292	31,970	2,82,253

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor, sub-heads and units of appropriation).	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
SIXTH CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
8. *c. Establishments*—cont.								
Allowances—Non-voted—								
Travelling allowance	3,244	2,228	2,927	4,760	3,019	1,510	1,601	19,289
Other compensatory	..	..	..	(—) 15	..	.	..	(—) 15
Total ..	3,244	2,228	2,927	4,745	3,019	1,510	1,601	19,274
Allowances—Voted—								
Travelling allowance	4,133	4,151	6,682	11,683	6,230	10,375	2,959	46,213
Fixed travelling allowance	..	2,369	2,243	3,029	2,038	1,904	1,548	13,131
Other compensatory	1,843	380	369	390	5,023	384	476	8,865
Total ..	5,976	6,900	9,294	15,102	13,291	12,663	4,983	68,209
Contingencies—Non-voted—								
Rates and taxes	153	35	42	..	160	24	..	414
Contingencies—Voted—								
Rents	930	563	811	1,145	843	880	..	5,172
Telephone charges..	..	..	..	..	..	..	180	180
Books and periodicals	7	2	2	2	..	2	..	15
Miscellaneous	2,169	1,820	2,563	2,542	1,882	2,060	511	13,547
Total ..	3,259	2,420	3,418	3,689	2,885	2,966	691	19,328
Charges payable to Governments, departments and others.	..	..	..	..	1,105	..	..	1,105
Supplies and Services—General—								
Apparatus and Materials	79	110	79	3	261	273	10	815
Total ..	79	110	79	3	1,366	273	10	1,920
Grand Total ..	60,667	56,848	59,747	1,08,612	72,118	71,579	47,483	4,77,054
Non-voted ..	31,519	8,262	10,189	23,437	14,113	8,409	9,829	1,05,758
Voted ..	29,148	48,586	49,558	85,175	58,005	63,170	37,654	3,71,296

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor, sub-heads and units of appropriation).	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
SIXTH CIRCLE—*cont.*		RS.	RS.	RS.	RS.	RS.	RS.	RS.
52. A—*b. Organization, improvement and extension of Forests.*								
Demarcation	..	..	..	487	..	..	2	489
Cost of Forest Settlement and compensation for land and rights.	..	..	104	..	..	..	..	104
Working plans	..	28	..	..	..	..	196	224
Total 52 A—*b*	..	28	104	487	..	..	198	817
52. A—*c. Communications and Buildings.*								
Roads and bridges—								
Works in progress	..	..	..	4,548	..	78	..	4,626
New works	..	..	749	735	..	2,451	..	3,935
Buildings—								
Works in progress	..	421	51	913	(—) 216	..	2,355	3,524
New works	..	567	1,967	734	596	409	7,854	12,127
Other works—								
Works in progress	..	144	..	335	..	..	768	1,247
New works	..	839	327	175	..	1,091	..	2,432
Total 52 A—*c*	..	1,971	3,094	7,440	380	4,029	10,977	27,891

Summary of expenditure of the different districts for the year 1930-31—*cont.*

Account heads (major, minor, sub-heads and units of appropriation).	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
SIXTH CIRCLE—*cont.*								
52. A—*e. Livestock, stores, tools and plant.*								
Purchase of livestock	..	..	..	3,398	2,249	558	2,824	9,029
Purchase of stores, tools and plant	..	149	292	363	220	981	207	2,212
Total 52 A—*e*	..	149	292	3,761	2,469	1,539	3,031	11,241
52. A—*h. Investments in Government commercial undertakings.*								
Nilambur Valley Forests	..	..	..	..	..	..	—52,195	52,195
Grand Total 52 A—*b, c and e*	..	2,148	3,490	11,688	2,849	5,568	—37,989	—12,246

Summary of expenditure of the different divisions of the Forest Engineering Branch for the year 1930-31.

Budget heads.	Chief Forest Engineer.	Forest Utilization Officer.	Forest Engineer.	Total.
ENGINEERING BRANCH.	RS.	RS.	RS.	RS.
8. *b. Conservance, Maintenance and Regeneration.*				
I. Forest produce removed by Government Agency—Voted—				
Timber	..	13,876	292	14,168
II. Forest produce removed by consumers and purchasers.	..	127	..	127
III. Maintenance, repairs and renewals—				
Renewals or replacements of stores, tools and plants.	..	26	394	420
Communications and buildings—				
Roads and bridges	..	..	1,188	1,188
Buildings	..	10	21	31
Other works	..	24	..	24
Conservance and regeneration—				
Regeneration	..	1,907	..	1,907
Miscellaneous—Rates and taxes—Non-voted.	..	52	..	52
Supplies and services—Miscellaneous.	..	..	69	69
Supense works advances	..	..	— 2,065	— 2,065
Total ..	..	16,022	— 101	15,921
52-*A. Capital outlay on forests.*				
Communications and buildings—				
Roads and Bridges—				
Works in progress	..	..	15,887	15,887
New works	..	..	1,973	1,973
Buildings—				
New works	..	167	..	167
Livestock, stores, tools and plant—				
Purchase of stores, tools and plant	..	..	499	499
Investments in Government commercial undertakings—				
Nilambur Valley forests	..	..	— 1,360	— 1,360
Chenat Nair	..	..	— 1,87,874	— 1,87,874
Deduct receipts and recoveries of capital expenditure.	..	..	— 6,405	— 6,405
8. *c.* iii. *Exploitation.*				
Pay of officers—				
Non-voted	..	19,000	12,200	31,200
Voted	19,161	5,480	7,024	31,665
Pay of establishments—Voted—				
Permanent	98	4,057	10,226	14,381
Temporary	2,011	8,954	3,164	14,129

Summary of expenditure of the different divisions of the Forest Engineering Branch for the year 1930-31—*cont.*

Budget heads.	Chief Forest Engineer.	Forest Utilization Officer.	Forest Engineer.	Total.
ENGINEERING BRANCH—*cont.*	Rs.	Rs.	Rs.	Rs.
8. *c.* iii. *Exploitation*—cont.				
Allowances—Non-voted—				
Travelling allowance	..	5,992	4,629	10,621
Other compensatory	..	4,200	...	4,200
Cost of passages, etc.	..	..	2,991	2,991
Allowances—Voted—				
Travelling allowance	4,536	5,199	5,898	15,633
Fixed travelling allowance	..	38	529	567
Other compensatory	43	887	299	1,229
Contingencies—Non-voted—				
Rates and taxes	..	65	..	65
Contingencies—Voted—				
Rents	698	1,559	1,337	3,594
Telephone charges	26	85	..	111
Books and periodicals	51	..	..	51
Miscellaneous	111	1,323	1,432	2,866
Supplies and services—Voted—				
Apparatus and materials	..	40	36	76
Miscellaneous	..	..	15	15
Total ..	26,735	56,879	49,780	1,33,394

ANNUAL FORM No. 39.

Summary of Revenue and Expenditure for 1930-31.

ANNUAL

Summary of Revenue and

Budget heads.	First Circle.	Second Circle.	Third Circle.	Fourth Circle.	Fifth Circle.	Sixth Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
VIII. FOREST—RECEIPTS.						
(a) Timber and other produce removed from the forests by Government Agency—	RS.	RS.	RS.	RS.	RS.	RS.
Sandalwood	..	..	..	1,74,529	2,41,118	.21,695
Other produce—						
Timber	39,800	22,170	3	4,615	1,77,942 (a) — 20	6,75,068
Firewood and charcoal.	4,078	1,911	..	1,393	846 (a) + 20	30,624
Bamboos	52	147	..	5	..	582
Other minor produce ..	7,126	..	..	119	853 (a) + 354	4,423
Total ..	51,056	24,258	3	6,132	1,79,641	7,10,697
Total (a) ..	51,056	24,258	3	1,80,661	4,20,759	7,32,392
(b) Timber and other produce removed from the forests by consumers or purchasers—						
Forest Department—						
Timber	21,723	24,703	..	1,789	6,463	650
Firewood and charcoal. ..	2,16,479 (x) + 9	1,71,383	..	72,452	2,26,722	78,926
Bamboos	1,39,242	68,230	..	1,13,827	36,453	18,179
Grazing and fodder grass	1,06,837	1,50,255	..	1,84,115	1,20,971	29,500
Other minor produce ..	60,861	40,167	..	56,951	64,576 (a) — 356	19,747
Total, Forest Department ..	5,45,142	4,54,738	..	4,29,134	4,55,185	1,47,002
Revenue Department—						
Timber	23,221 (a) + 4	21,661	..	65,811	18,830	21,095
Firewood and charcoal.	16,788 (a) + 7	9,929	..	43,450	32,571	11,555
Bamboos	135	..	..	3	31	38
Other minor produce ..	51,882	1,95,254 (a) + 10	..	76,719 (a) — 10	39,282	7,169
Total, Revenue Department ..	92,026	2,26,844	..	1,85,983	..	39,857
(c) Drift and waif wood and confiscated forest produce.	5,510	2,380	..	708	891	1,250
(d) Profits from Government commercial undertakings—						
Nilambur Valley Forests.	..	..	..	..	..	1,21,189
Mount stuart	..	..	..	..	38,464	..
(e) Recoveries of indirect charges from Government commercial undertakings—						
Russellkonda Saw Mills.	..	..	..	..	..	..
Mount Stuart Forests ..	..	..	..	..	6,544	..
Nilambur Valley Forests.	..	..	..	..	..	..
Chenat Nair	..	..	..	..	..	..
Total (a) ..	..	..	..	..	6,544	..

(a) Added or deducted with reference to Accountant-General's actuals.

FORM No. 39.

Expenditure for 1930–31.

Forest Engineering Branch. (8)	Parlakimedi Maliahs. (9)	Golgonda Agency. (10)	Forest College. (11)	Research officer. (12)	Chenchu officer. (13)	Chief Conservator. (14)	Total. 1930-31. (15)	Total. 1929-30. (16)
RS.	RS.	RS.				RS.	RS.	RS.
..	..	..	..	..	..	..	4,37,342	9,86,618
2,688	3,869	3,559	..	..	..	1,124	9,30,838	10,02,840
..	1,768	..	..	..	..	..	40,650	60,878
..	10	..	..	..	..	..	796	275
..	235	..	..	..	..	..	12,756	22,110
2,688	5,882	3,559	..	..	..	1,124	9,85,040	10,86,098
2,688	5,882	3,559	..	..	..	1,124	14,22,382	20,72,716
..	7,517	610	..	..	..	..	63,455	1,46,389
..	4,925	..	..	..	..	..	7,70,887	7,63,972
..	3,221	..	..	..	..	..	3,79,152	4,40,295
..	1,456	273	..	..	..	..	5,93,407	6,41,629
2,220	19,758	800	..	..	..	..	2,65,080	3,28,014
2,220	36,877	1,683	..	..	..	..	20,71,981	23,20,299
..	..	..	..	..	..	..	1,50,618	2,33,866
..	..	..	..	..	..	..	1,14,293	1,22,539
..	..	..	..	..	..	..	207	1,208
..	..	..	..	..	..	— 4,893	3,65,413	5,52,566
..	..	..	..	..	..	— 4,893	6,30,531	9,10,179
..	42	..	..	..	..	..	10,781	12,495
..	..	..	..	..	..	..	1,21,189	1,24,370
..	..	..	..	..	..	..	38,464	..
..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	6,544	34,125
..	..	..	..	..	..	..	..	53,939
..	..	..	..	..	..	..	..	26,954
..	..	..	..	..	..	..	6,544	1,15,018

Summary of Revenue and

Budget heads.	First Circle.	Second Circle.	Third Circle.	Fourth Circle.	Fifth Circle.	Sixth Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
VIII. FOREST—RECEIPTS—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(*f*) Recoveries of investments in Government commercial undertakings—						
Russellkonda Saw Mills	..	..	..	..	..	..
Chenat Nair Exploitation Scheme including Olavakkot Saw Mill.	..	..	..	..	..	..
Nilambur	..	..	..	..	..	..
Mount Stuart	..	..	..	..	68	..
Total (*f*) ..	..	..	..	..	..	..
(*g*) Miscellaneous—						
Fines and forfeitures ..	4,992	5,656	1	3,864	2,204	1,471
Forest College	..	..	..	..	..	..
Rents of buildings ..	5,920 (*a*) + 477	9,315	867 (*a*) — 5	8,092	6,384	12,162
Other sources	41,485 (*a*) — 476	5,6870	447 (*a*) —15	75,184	61,356	50,697
Total (*g*) ..	52,397	71,841	1,315	87,140	69,944	64,330
Total ..	7,46,131	7,80,061	1,318	8,83,626	10,82,569	11,06,020
Deduct — Refunds — Voted—Refunds by forest officers.	5,409 (*b*) + 621	1,090 (*b*) + 332	9	8,733 (*b*) + 595	5,187 (*b*) + 2,204	3,161
Grand Total ..	7,40,100 (*a*) + 11	7,78,639 (*a*) + 10	1,309 (*a*)— 21	8,74,298 (*a*) — 10	10,75,178	11,02,859 (*a*) + 1
Loss or gain by exchange ..	..	..	..	..	..	..
	7,89,992	7,78,649	1,288	8,74,288	10,75,178	11,02,860
EXPENDITURE.						
8. (*b*) *Conservancy, Maintenance and Regeneration.*						
I. Forest produce removed by Government agency—						
Voted—						
Timber	18,259	9,327 (*a*) + 15	47	1,419	92,169	3,97,122
Firewood and charcoal.	235	153	..	..	1,532	18,007
Bamboos	..	77	..	..	..	706
Sandalwood	..	218	..	40,814	33,191	3,761
Grass and other minor produce.	8,924	..	..	75	2,349	2,140
Total I ..	27,418	9,775	47	42,308	1,29,241	4,21,736

(*a*) Added or deducted with reference to the Accountant-General's actuals.
(*b*) Added as the Conservators have not included the Accountant-General's adjustments in

Expenditure for 1930-31—*cont.*

Forest Engineering Branch.	Parlakimedi Maliahs.	Golgonda Agency.	Forest College.	Research officer.	Chenchu officer.	Chief Conservator.	Total.	
							1930-31.	1929-30.
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.
..	..	..	..	..	..	..	..	1,21,000
								— 1,21,000
..	..	..	..	..	..	..	..	2,448
								— 2,448
..	..	..	..	..	..	..	..	1,832
								— 1,832
2,500	..	..	..	..	..	..	2,568	..
..	..	..	..	..	..	..	..	1,25,280
								— 1,25,280
201	124	12	..	..	..	..	18,525	19,469
..	..	..	54,689	..	..	..	54,689	46,294
48	175	68	983	..	..	..	44,014	57,022
62,858	1,381	78	..	..	..	171	3,50,527	3,46,066
63,107	1,680	158	55,672	..	..	171	4,67,755	4,68,851
70,515	44,481	5,400	55,672	..	..	— 3,598	47,72,195	61,49,208
								— 1,25,280
61,356	..	1	..	..	..	..	84,946	30,217
							(*b*) + 3,752	
9,159	44,481	5,399	55,672	..	..	— 3,598	46,83,497	61,18,992
							(*a*) — 9	— 1,25,280
..	..	..	..	..	..	..	— 94	(*a*) + 1
								+ 352
9,159	44,481	5,399	55,672	..	..	— 3,598	46,83,394	61,19,344
								— 1,25,280
								59,93,712
								+ 352
								59,94,064
14,168	847	2,286	..	..	..	..	5,35,644	5,48,270
..	467	..	..	..	..	..	20,394	18,459
..	..	..	..	..	..	..	783	126
..	..	..	..	..	..	..	77,984	68,108
..	80	..	..	..	..	..	13,568	9,608
14,168	1,394	2,286	..	..	..	..	6,48,373	6,44,671

March Final Accounts correctly in their accounts.

Summary of Revenue and

Budget heads.	First Circle.	Second Circle.	Third Circle.	Fourth Circle	Fifth Circle.	Sixth Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
EXPENDITURE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. *b. Conservancy, Maintenance and Regeneration*—cont.						
II. Forest produce removed by private agency—Voted—						
Timber and other produce.	49,171	50,457	..	49,345	44,833	11,155
III. Maintenance, repairs and renewals—						
(*a*) Feed and keep of live-stock.	3,228	2,154	..	38	13,844	64,671
(*b*) Renewals or replacements of stores, tools and plant.	6,777	889	172	532	802	5,823
(*c*) Communications and buildings—						
Forest college.	..	..	..	..	..	..
Chenchu officer.	..	..	..	..	..	..
Roads and bridges.	9,190	6,010	(*a*) — 6	16,483	35,730	20,725
Buildings ..	23,339	9,602	412 (*a*) — 6	13,019	14,064	14,246 (*a*) + 19
Non-voted—						
Rates and taxes.	474	857	..	785	383 (*a*) — 76	702
Other works ..	513	112	..	777	1,764 (*a*) — 77	1,552
Total III ..	43,521	19,624	584	31,064	66,587	1,07,719
IV. Conservancy and Regeneration—						
(*a*) Maintenance of boundaries.	1,828	519	..	1,282	222	1,855
(*b*) Forest surveys ..	..	600	..	..	..	..
(*c*) Regeneration ..	4,724	2,147	129	6,849	14,096	54,828
(*d*) Fire protection ..	14,066	4,008	..	5,696	8,135 (*a*) — 114	14,969
(*e*) Other works	6,667	403	..	77	3,760	1,762
Total IV ..	27,285	7,677	129	13,904	26,213	73,414
V. Miscellaneous—						
Rates and taxes—Non-voted.	165	6	..	3	238 (*a*) + 76	1,987
Law charges	2	1	..	26	..	..
Drift waifwood and confiscated produce	95	162	..	35	26	37
Rent of leased and part-owned forests.	4,990	..	..	46	2,500	..
Grants-in-aid—Recurring — Voted.	..	..	..	..	..	4,833
Miscellaneous—						
Supplies and services—Voted.	2	306	..	3,043	939	1,245
Honoraria—Voted ..	145	480	..	189	48	76
Other charges	..	..	..	..	..	..
Total V ..	5,399	955	..	3,342	3,751	8,178

(*a*) Added or deducted with reference to the Accountant-General's actuals.

Expenditure for 1930-31—*cont.*

Forest Engineering Branch.	Parlakimedi Maliahs.	Golgonda Agency.	Forest College.	Research officer.	Chenchu officer.	Chief Conservator.	Total.	
							1930-31.	1929-30.
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
127	1,987	590	..	..	..	..	2,07,665	2,00,090
..	..	..	..	..	..	..	83,935	77,032
420	178	..	..	..	..	..	15,593	52,413
..	..	..	5,423	..	..	..	5,423	4,571
..	..	..	..	..	598	..	598	452
1,188	..	..	..	..	..	..	89,326	88,129
31	352	206	..	..	..	..	75,271	65,435
..	..	..	..	..	..	..	3,201	2,612
24	99	..	..	..	..	..	4,841	3,671
1,663	629	206	5,423	..	598	..	2,78,188	2,94,315
..	..	440	..	..	..	..	6,146	4,411
..	..	..	..	..	..	6,900	7,500	7,563
1,907	68	338	..	..	..	..	85,086	46,305
..	592	69	..	..	..	..	47,535	42,508
..	..	23	..	..	..	..	12,692	12,087
1,907	660	870	..	..	..	6,900	1,58,959	1,12,874
52	..	..	..	..	..	..	2,451	2,991
..	..	..	..	..	..	..	29	41
..	..	..	..	..	..	..	355	551
..	..	..	..	..	..	..	7,536	3,369
..	..	..	..	..	..	..	4,833	5,396
69	..	..	..	..	..	..	5,604	6,067
..	..	..	..	..	..	..	938	581
..	..	..	..	..	..	..	..	— 1
121	..	..	..	..	..	..	21,746	18,995

Summary of Revenue and

Budget heads.	First Circle.	Second Circle.	Third Circle.	Fourth Circle.	Fifth Circle.	Sixth Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
EXPENDITURE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. *b. Conservancy, Maintenance and Regeneration*—cont.						
VI. Suspense—Works—Advances.	40	— 62	..	25	393	214
Grand Total ..	1,52,834 (*a*) + 7	88,426 (*a*) + 15	760 ..	1,40,558 ..	2,71,018 (*a*) — 190	6,22,416 (*a*) + 19
Added or deducted with reference to Accountant-General's actuals.	1,52,841	88,441	760	1,40,558	2,70,828	6,22,436
8. *c. Establishments.*						
Pay of officers—Non-voted ..	66,811	97,004	— 35	77,188	93,832 (*x*) + 290	86,070
Pay of officers—Voted	55,994	21,191	..	34,450	9,692 (*a*) + 449	42,803
Pay of Establishments—Voted—						
Permanent	2,29,198	2,27,907	(*a*) 40	2,23,779	2,02,609 (*a*) + 13	2,30,243
Temporary	7,650	4,294	...	8,811	4,791	9,207
Allowances—Non-voted—						
Travelling allowance	12,772	11,793	..	11,504	20,827	19,289
Other Compensatory	..	..	..	..	..	15
Cost, passages, etc.	2,979	..	..	1,260	5,314	..
Allowances—Voted—						
Travelling allowance	41,744	32,247	..	27,561	31,127	46,213
Fixed travelling allowance ..	11,215	10,205	(*a*) 8	10,643	8,856	13,131
Other compensatory	4,218	5,200	..	3,466	3,463	8,865
Grants-in-aid	..	..	..	..	..	..
Honoraria—Voted	..	..	..	..	..	..
Contract contingencies—Voted ..	..	..	..	..	..	..
Contingencies—Non-voted—						
Rates and taxes	3,843	1,942	..	512	1,655	414
Non-contract contingencies—Voted—						
1. Pay of menials	..	..	..	..	..	5,172
2. Rents	7,432	7,511	..	6,787	6,016	..
3. Electric current	..	..	..	..	..	..
4. Telephone charges ..	150	..	..	..	548	180
5 Books and periodicals ..	14	43	..	4	48	15
6. Miscellaneous	16,840	17,475	..	14,913	13,664	13,547
	..	(*a*)—15	..	..	..	..
Customs duty—Voted	..	..	..	..	..	..
Supplies and services—Voted—						
1. Clothing and equipment ..	..	..	..	..	..	..
2. Scholarships and stipends ..	..	..	..	..	..	..
3. Apparatus and materials ..	1,036	1,303	..	490	825	815
4. Books and periodicals ..	..	..	..	..	..	..
5. Miscellaneous	..	..	..	..	..	..
6. Charges payable to Governments, Departments and others.	1,577	2,125	..	3,372	1,966	1,105
Total ..	4,63,473 (*a*) + 1	4,40,240 (*a*)—16	— 35 + 48	4,24,739 (*a*) —1	4,05,233 (*a*) + 303 (*a*) + 449	4,77,054 ..
52-*A. Capital outlay.*	4,63,474	4,40,224	7	4,24,738	4,05,985	4,77,054
(*b*) Conservancy and works.						
II. Forest produce removed by private agency.	..	..	..	..	..	..

(*a*) Added or deducted with reference to the Accountant-General's actuals.
(*b*) Includes figures relating to general direction and the Golgonda agency.
(*c*) Chief Conservator's office.

Expenditure for 1930–31—*cont.*

Forest Engineering Branch. (8)	Parlakimedi Maliahs. (9)	Golgonda Agency. (10)	Forest College. (11)	Research officer. (12)	Chenchu officer. (13)	Chief Conservator. (14)	Total. 1930-31. (15)	Total. 1929-30. (16)
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
— 2,065	..	..	..	..	..	..	— 1,455	2,329
15,921	4,670	3,952	5,423	..	598	6,900	13,13,476	12,72,997
..	..	..	..	..	..	..	(*a*) — 149	..
15,921	4,670	3,952	5,423	..	598	6,900	13,13,327	12,72,997
31,200	..	..	17,088	16,182	..	..	4,85,340	4,66,187
..	..	..	..	..	..	..	..	..
31,665	7,850	..	21,958	..	..	..	2,25,603	2,79,240
..	..	..	..	..	..	..	..	..
14,381	17,170	2,042	12,720	6,605	..	136	11,66,830	11,75,478
14,129	1,016	1,956	..	..	16,530	..	68,384	81,632
10,621	..	..	2,126	3,611	..	..	92,443	90,457
4,200	244	70	..	..	..	..	4,499	5,760
2,991	..	..	..	..	..	7,110	22,633	14,642
15,633	4,709	748	3,774	2,530	2,245	..	2,08,531	2,27,834
567	692	195	..	263	300	..	56,075	54,674
1,229	..	..	..	694	180	..	27,315	26,741
..	..	..	400	..	..	..	400	400
..	..	..	855	..	..	..	855	855
..	..	..	..	..	..	..	..	82,171
65	4	96	19	92	..	..	8,642	6,026
..	..	..	2,186	..	..	..	7,358	..
3,594	588	277	..	79	26	..	32,310	44,218
..	..	..	..	..	..	..	..	993
111	..	..	235	144	..	..	1,368	726
51	2	..	..	..	..	..	177	2,680
2,866	1,704	299	4,502	883	1,357	..	88,050	8,901
..	..	..	..	..	..	..	..	3,723
..	..	..	..	..	696	..	696	28,529
..	..	..	..	..	99	..	9,480	8,670
76	50	..	4,726	60	727	..	727	..
15	..	..	301	5,588	221	..	522	192
..	..	..	2,731	6,588	4,777	..	14,111	7,194
..	3,048	..	6,236	14,616	..	..	24,075	33,105
1,33,394	37,077	5,683	79,857	52,281	27,158	7,246	25,53,400	26,50,577
..	..	..	..	..	..	..	..	(*b*) — 640
..	..	..	..	..	..	..	(*a*) + 784	(*c*) 26,49,937
1,33,394	37,077	5,683	79,857	52,281	27,158	7,246	25,54,184	..
..	..	..	..	..	..	..	..	421

Summary of Revenue and

Budget heads.	First Circle.	Second Circle.	Third Circle.	Fourth Circle.	Fifth Circle.	Sixth Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
EXPENDITURE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.
52-*A. Capital outlay*—cont.						
(*b*) Conservancy and works—*cont.*						
IV. Rent of leased and part-owned forest.	..	..	..	..	..	..
V. Live-stock, stores, tools and plant—						
Purchase of cattle ..	..	..	..	..	17,452	9,029
Feed and keep of live-stock.	..	..	..	..	2,762	..
Purchase of stores, tools and plant.	737	118	468	4,518	..	2,212
Total ..	737	118	468	4,518	20,214	11,241
VI. Works—Voted—						
Forest College—						
Works in progress	..	..	..	..	..	..
Roads and bridges—						
Works in progress	6,524	7,078	..	152	3,259	4,626
New works	4,750	2,058	..	8,407	10,609	3,935
Buildings—						
Works in progress	3,576	5,241	..	600	176	3,524
New works	3,865	5,443	..	10,024	15,155	12,127
Other works—						
Works in progress	310	445	..	975	..	1,247
					(*a*) + 200	
New works	269	596	..	764	881	2,432
					(*a*) — 8	
Total ..	19,294	20,861	..	20,922	30,080	27,891
VII. Organization, improvement and extension of forests—						
Demarcation	5,101	..	..	2,098	2,550	489
Cost of forest settlement, etc.	..	..	..	..	..	104
Surveys—Local ..	2,922	..	..	1,580	..	..
Working plans ..	..	..	14,927	..	..	224
Sowing and planting..	5,403	..	..	..	8,861	..
Protection from fire ..	..	..	..	..	1,609	..
					(*a*) + 115	
Other works	24	..	..	174	1,364	..
					(*a*) — 115	
Total ..	13,450	..	14,927	3,852	14,384	817
VIII. Miscellaneous—						
Non-contract contingencies—						
Non-voted—						
Rates and taxes	..	..	..	..	..	..
General—Miscellaneous ..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..
Grand Total ..	33,481	20,979	15,395	29,292	..	..

(*a*) Added or deducted with reference to the Accountant-General's actuals.

Expenditure for 1930-31—*cont.*

Forest Engineering Branch.	Parlakimedi Maliahs.	Golgonda Agency.	Forest College.	Research officer.	Chenchu officer.	Chief Conservator.	Total.	
							1930-31.	1929-30.
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.				Rs.	Rs.	Rs.
..	..	..	..	..	..	..	..	2,500
..	..	..	..	..	..	..	26,481	13,228
..	..	..	..	..	..	..	2,762	1,429
499	..	..	..	..	..	6,042	14,594	15,303
499	..	..	..	..	..	6,042	43,837	32,880
..	..	..	..	..	..	..	..	..
15,887	..	..	..	..	..	..	37,526	11,083
1,973	..	..	..	..	..	..	31,732	50,469
..	..	..	..	..	..	..	13,117	22,185
167	10	23	..	..	..	..	46,814	66,929
..	..	..	..	..	..	..	2,977	4,488
..	..	..	..	.	..	..	4,942	4,456
18,027	10	23	..	..	..	..	1,37,108	1,59,610
..	..	105	..	..	..	..	10,343	6,663
..	..	..	..	..	..	..	104	..
..	..	58	..	..	..	..	4,560	11,977
..	..	..	..	..	..	..	15,151	12,040
..	..	..	..	..	..	..	14,264	31,132
..	..	..	..	..	..	..	1,609	8,685
..	..	..	..	..	..	..	1,562	1,133
..	..	163	..	..	..	..	47,593	66,630
..	..	..	..	..	..	..	..	96
..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	96
..	10	186	..	..	..	..	..	2,59,217 (*a*) + 26 2,59,243

Summary of Revenue and

Budget heads. (1)	First Circle. (2)	Second Circle. (3)	Third Circle. (4)	Fourth Circle. (5)	Fifth Circle. (6)	Sixth Circle. (7)
	RS.		RS.		RS.	RS.
EXPENDITURE—*cont.*						
52-A. b. Regeneration.						
Pay of officers—						
Non-voted	..	..	71,188 (*a*)+387	..	..	..
Voted	..	..	23,899	..	..	..
Pay of establishments—Voted—						
Permanent	..	..	40,400	..	4,066	..
Temporary	..	..	11,725	..	592	..
Allowances—Non-voted—						
Travelling allowance	..	..	17,509	..	..	..
Cost of passages, etc.	..	..	..	..	..	..
Allowances—Voted—						
Travelling allowance	..	..	24,035 (*a*)+ 90	..	613	..
Other compensatory	..	..	4,567	..	77	..
Fixed travelling allowance ..	..	..	6,228	..	444	..
Total ..	..	..	1,99,521	..	5,792	..
Contract contingencies—Voted ..	..	..	..	..	..	..
Non-contract contingencies—						
Non-voted—						
Rates and taxes .. .	..	..	..	..	..	..
Non-contract contingencies—						
Voted—						
Rents	..	..	437	..	..	..
Telephone charges	..	..	..	..	409	..
Books and periodicals ..	..	..	40	..	..	..
Miscellaneous	..	..	4,580 (*a*)— 6	..	..	..
Total ..	..	..	5,057	..	409	..
Supplies and Services—Voted—						
Apparatus and materials ..	..	..	502	..	161	..
Miscellaneous	..	..	1,169	..	..	..
Total ..	..	..	1,671	..	161	..
Grand total ..	..	..	2,06,249 (*a*)+471	..	6,362	..
52-A. d. Investments in Government commercial undertakings.						
Mount Stuart forests.. ..	..	..	..	..	— 46,488	— 52,195
Nilambur valley forests ..	..	..	..	..	..	..
Chenat Nair forests	..	..	..	..	..	..
Deduct—Recoveries of investments in Government Commercial undertakings.	..	..	..	..	— 17,580	..

(*a*) Added or deducted with reference to Accountant-General's actuals.

Expenditure for 1930-31—*cont.*

Forest-Engineering Branch. (8)	Parlakimedi Maliahs. (9)	Golgonda Agency. (10)	Forest College. (11)	Research officer. (12)	Chenchu officer. (13)	Chief Conservator. (14)	Total. 1930-31 (15)	Total. 1929-30. (16)
Rs.						Rs.	Rs.	Rs.
..	..	..	..	..	..	..	71,188	62,088
..	..	..	..	..	..	..	23,899	22,210
..	..	..	..	..	..	..	44,466	41,997
..	..	..	..	..	..	..	12,317	8,263
..	..	..	..	..	..	..	17,509	19,802
..	..	..	..	..	..	..	..	864
..	..	..	..	..	..	..	24,618	19,344
..	..	..	..	..	..	..	4,644	1,872
..	..	..	..	..	..	..	6,672	3,714
..	..	..	..	..	..	..	2,05,313	1,80,154
..	..	..	..	..	..	..	..	3,403
..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	437	762
..	..	..	..	..	..	..	409	180
..	..	..	..	..	..	18	58	12
..	..	..	..	..	..	..	4,580	118
..	..	..	..	..	..	18	5,484	4,475
..	..	..	..	..	..	..	663	276
..	..	..	..	..	..	..	1,169	298
..	..	..	..	..	..	..	1,832	574
..	..	..	..	..	..	..	2,12,611	1,85,203 + 1
— 1,360	..	..	..	..	..	..	— 1,00,043	27,321
—1,87,874	..	..	..	..	..	..	— 1,87,874	— 1,95,226
..	..	..	..	..	..	..	..	— 1,67,905
— 6,405	..	..	..	..	..	..	— 23,985	— 87,847
								+ 69,945

Summary of Revenue and

Budget heads.	First Circle.	Second Circle.	Third Circle.	Fourth Circle.	Fifth Circle.	Sixth Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
						Ab
VIII. Forest—Receipts	..	..	..	..	..	.. ..
8. *Expenditure*—						
(*a*) General direction—Chief Conservator's Office.	..	..	..	..	..	..
(*b*) Conservancy and works.						
(*c*) i, iii and iv—District establishments including the Engineering Utilization Officers Division and Forest College.	..	..	..	..	..	..
(*c*) ii. Forest Research Officer.	..	..	..	..	..	..
(*c*) v. Chenchu Officer ..	..	..	..	..	..	..
(*e*) Losses in Government Commercial undertakings.	..	..	..	..	..	..
Loss by exchange expenditure in England.	..	..	..	..	..	..
20 Interest—Interest on deposits from depreciation reserve of Government commercial undertakings.	..	..	..	..	..	..
52. A. *Capital outlay on forests.*						
(*b*) Conservancy and works.	..	..	..	..	..	..
(*c*) ii. Regeneration ..	..	..	..	..	..	..
(*d*) Investments in Government commercial undertakings.	..	..	..	..	..	..
Total ..	..	..	..	..	..	..
Deduct—Recoveries of investments on Government commercial undertakings.	..	..	..	..	..	..
Grand total ..	..	..	..	..	..	

Expenditure for 1930-31—*cont.*

Forest Engineering Branch.	Parlakimedi Maliahs.	Golgonda Agency.	Forest College.	Research officer.	Chenchu officer.	Chief Conservator	Total.	
							1930-31.	1929-30.
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
stract.								
							Rs.	Rs.
..	..	..	..	..	..	..	46,83,394	59,94,064
..	..	..	..	..	..	..	1,12,524	1,38,067
..	..	..	..	..	..	..	13,13,327	12,72,997
..	..	..	..	..	..	..	24,74,745	25,18,629
..	..	..	..	..	..	..	52,281	44,933
..	..	..	..	..	..	..	27,158	26,470
..	..	..	..	..	..	..	3,704	69,946
..	..	..	..	..	..	..	1,844	..
..	..	..	..	..	..	..	1,64,280	1,93,681
..	..	..	..	..	..	..	2,28,730	2,59,243
..	..	..	..	..	..	..	2,13,100	1,85,204
..	..	..	..	..	..	..	..	— 1,67,905
							— 2,87,877	
..	..	..	..	..	..	..	..	2,76,542
..	..	..	..	..	..	..	..	..
							23,985	17,902
..	..	..	..	..	..	..	42,79,831	45,23,563

Annual Form No. 40.

Forest Department, Madras Presidency.

Outstandings and liabilities on account of contractors and disbursers for the year 1930–31.

Division.	Department debtor.			Department creditor.			Balance due	
	At commencement of the year.	Recoveries in cash and value of supplies and work done during the year.	At close of the year.	At commencement of the year.	Payments made during the year.	At close of the year.	To department (outstandings).	By department (liabilities).
First Circle.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Conservator	..	957 14 3	957 14 3	1 4 3	975 9 9	976 14 0	18 15 9	..
Parlakimedi Maliahs ..	..	23,551 1 2	23,551 1 2	1,268 14 8	23,250 12 8	24,519 11 4	968 10 2	..
Vizagapatam	..	33,907 1 11	33,907 1 11	391 10 11	33,552 8 0	33,944 2 11	37 1 0	..
Upper Godavari	..	78,099 7 9	78,099 7 9	310 1 2	78,572 15 0	78,883 0 2	783 8 5	..
Lower Godavari	..	89,404 0 2	89,404 0 2	1,045 10 0	89,046 6 5	90,092 0 5	688 0 3	..
Nellore	..	78,391 8 0	78,391 8 0	200 11 1	78,276 11 5	78,477 6 6	85 14 6	..
Guntur	..	52,806 11 10	52,806 11 10	2,457 4 1	50,410 1 3	52,867 5 4	60 9 6	..
Golgonda Agency ..	..	9,530 13 11	9,530 13 11	199 8 8	9,345 14 0	9,545 6 8	14 8 9	..
Ganjam	..	1,32,451 12 7	1,32,451 12 7	951 8 3	1,31,818 6 5	1,32,769 14 8	318 2 1	..
Total ..	..	4,99,100 7 7	4,99,100 7 7	6,826 9 1	4,95,249 4 11	5,02,075 14 0	2,975 6 5	..
Second Circle.								
Direction II Circle ..	..	1,376 10 0	1,376 10 0	29 8 1	1,389 6 0	1,418 14 1	42 4 1	..
South Cuddapah ..	..	60,394 1 11	60,394 1 11	158 3 11	60,284 15 6	60,443 3 5	49 4 6	..
North ,, ..	..	48,895 0 1	48,895 0 1	216 11 4	48,954 4 0	49,170 15 4	275 15 3	..
East Kurnool	..	67,701 9 7	67,701 9 7	637 11 2	67,652 7 0	68,290 2 2	588 8 7	..
South ,, ...	..	62,589 13 10	62,589 13 10	0 7 4	62,590 1 11	62,590 9 3	0 11 5	..
West ,, ...	..	76,662 15 2	76,662 15 2	218 0 0	76,514 15 0	76,732 15 0	69 15 10	..
Anantapur	..	45,814 0 8	45,814 0 8	245 0 5	45,766 9 6	46,011 9 11	197 9 3	..
Total ..	..	3,63,434 3 3	3,63,434 3 3	1,505 10 3	3,63,152 10 11	3,64,658 5 2	1,224 1 11	..

Third Circle.									
Direction	..	31,598 14 9	31,598 14 9	781 13 9	31,737 13 0	32,519 10 9	920 12 0	..	
Working Plans—									
Lower Godavari ..	..	5,903 4 6	5,903 4 6	194 11 6	5,708 9 0	5,903 4 6	..	..	
Wynaad	..	4,543 0 0	4,543 0 0	..	4,661 4 0	4,661 4 0	118 4 0	..	
North Coimbatore ..	..	9,129 15 0	9,129 15 0	28 15 0	9,424 11 0	9,453 10 0	323 11 0	..	
South Mangalore ..	..	6,926 1 0	6,926 1 0	34 3 0	7,002 1 0	7,036 4 0	110 3 0	..	
Mount Stuart ..	..	22,960 13 0	22,960 13 0	107 4 4	22,893 9 6	23,000 13 10	40 0 10	..	
Forest research	..	13,120 4 3	13,120 4 3	115 1 6	13,190 15 9	13,306 1 3	185 13 0	..	
Total ..	..	94,182 4 6	94,182 4 6	1,262 1 1	94,618 15 3	95,881 0 4	1,698 11 10	..	
Fourth Circle.									
Direction	..	666 15 6	666 15 6	50 9 8	657 10 5	708 4 1	41 4 7	..	
Salem, South	..	54,111 13 0	54,111 13 0	221 5 10	54,176 4 9	54,397 10 7	285 13 7	..	
Do. Central	..	67,469 1 6	67,469 1 6	287 3 1	67,340 9 6	67,627 12 7	158 11 1	..	
Do. North	..	87,530 0 10	87,530 0 10	377 6 10	87,178 8 4	87,555 15 2	25 14 4	..	
Vellore	..	1,35,444 3 3	1,35,444 3 3	496 6 5	1,35,351 4 0	1,35,847 10 5	403 7 2	..	
Chittoor	..	63,201 4 1	63,201 4 1	102 0 2	63,612 7 0	63,714 7 2	513 3 1	..	
Total ..	..	4,08,423 6 2	4,08,423 6 2	1,535 0 0	4,08,316 12 0	4,09 851 12 0	1,428 5 10	..	
Fifth Circle.									
Direction	..	1,511 7 3	1,511 7 3	51 1 11	1,461 15 0	1,513 0 11	1 9 8	..	
Coimbatore, South ..	..	93,555 14 4	93,555 14 4	474 6 5	1,00,428 3 0	1,00,902 9 5	7,346 11 1	..	
Do. North ..	..	98,271 3 11	98,271 3 11	277 13 6	98,169 14 8	98,447 12 2	176 8 3	..	
Kollegal	..	87,160 15 0	87,160 15 0	349 10 1	86,919 3 7	87,268 13 8	107 14 8	..	
Tinnevelly	..	62,583 7 9	62,583 7 9	377 4 5	62,723 7 3	63,100 11 8	517 3 11	..	
Madura	..	1,06,120 13 4	1,06,120 13 4	513 2 2	1,05,921 13 0	1,06,434 15 2	314 1 10	..	
Tanjore	..	136 9 0	136 9 0	..	136 9 0	136 9 0	..	..	
Total ..	..	4,49,340 6 7	4,49,340 6 7	2,043 6 6	4,55,761 1 6	4,57,804 8 0	8,264 1 5	..	
Sixth Circle.									
Direction	..	9,303 12 7	9,303 12 7	79 5 5	10,045 8 0	10,124 13 5	821 0 10	..	
North Mangalore ..	..	72,945 10 2	72,945 10 2	1,117 7 5	72,335 5 9	73,452 13 2	507 3 0	..	
South Mangalore ..	..	1,14,299 1 11	1,14,299 1 11	480 14 3	1,14,177 8 6	1,14,658 6 9	359 4 10	..	

Outstandings and liabilities on account of contractors and disbursers for the year 1930-31—*cont.*

Division.	Department debtor.			Department creditor.			Balance due	
	At commencement of the year.	Recoveries in cash and value of supplies and work done during the year.	At close of the year.	At commencement of the year.	Payments made during the year.	At close of the year.	To department (outstandings).	By department (liabilities).
Sixth Circle—cont.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Palghat		2,26,502 11 8	2,26,502 11 8	1,535 6 6	2,25,484 0 5	2,27,019 6 11	516 11 3	
Nilgiris		1,00,371 15 7	1,00,371 15 7	380 14 8	1,00,349 1 0	1,00,729 15 8	358 0 1	
Wynaad		2,43,715 11 4	2,43,715 11 4	1,112 12 6	2,44,242 8 1	2,45,355 4 7	1,639 9 3	
Total		7,67,138 15 3	7,67,138 15 3	4,706 12 9	7,66,633 15 9	7,71,340 12 6	4,201 13 3	
Forest Engineer		68,114 15 5	68,114 15 5	7,102 0 0	64,499 5 10	71,601 5 10	3,486 6 5	
Forest College		57,960 8 10	57,960 8 10	1,350 10 6	57,823 10 2	59,174 4 8	1,213 11 10	
Forest Utilization division.		25,516 0 3	25,516 0 3	411 0 5	25,016 7 0	25,427 7 5	88 8 10	
Grand total, Presidency.		27,33,211 3 10	27,33,211 3 10	26,743 2 7	27,31,072 3 4	27,57,815 5 11	24,604 2 1	

ANNUAL FORM No. 41.

Forest Department, Madras Presidency.

Revenue received and outstandings on account of revenue during the year 1930–31.

Annual Form No. 41.

Forest Department, Madras Presidency.

Revenue received and outstandings on account of revenue during the year 1930–31.

District.	Particulars.	Outstandings at commencement of the year.	Value of sales and other revenue during the year.	Total.	Amount realized during the year.	Balance due to the department at the end of the year.
First Circle.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Direction	Timber and other produce.	..	46,231 0 0	46,231 0 0	46,231 0 0	..
Ganjam	Do.	3,985 0 0	98,620 13 0	1,02,605 13 0	98,517 0 0	4,088 13 0
Vizagapatam	Do.	663 2 0	55,615 15 10	56,279 1 10	53,595 0 0	2,684 1 0
Godavari, Upper	Do.	1 5 0	43,323 0 0	43,324 5 0	40,633 0 0	2,691 5 0
Do. Lower	Do.	9,423 0 8	2,56,260 2 2	2,65,683 2 10	2,57,830 0 0	7,853 2 10
Guntur	Do.	29,071 12 5	1,38,438 7 7	1,67,510 4 0	1,57,093 0 0	10,417 4 0
Nellore	Do.	57,902 6 0	86,301 11 10	1,44,204 1 10	86,823 0 0	57,381 1 10
	Total ..	1,01,046 10 1	7,24,791 2 5	8,25,837 12 6	(*a*) 7,40,722 0 0 (*b*) — 621 0 0	(*c*) 85,115 12 6
Second Circle.						
Direction	Timber and other produce.	..	70 0 0	70 0 0	70 0 0	..
Anantapur	Do.	1,94,334 4 6	1,51,676 8 4	3,46,010 12 10	2,21,501 7 9	1,24,509 5 1
Kurnool, East	Do.	6,495 13 0	46,922 0 10	53,417 13 10	53,417 5 10	0 8 0
Do. South	Do.	358 0 0	1,33,654 7 2	1,34,012 7 2	1,17,361 13 2	16,630 10 0
					(*a*) 20 0 0	
Do. West	Do.	14,090 12 11	1,57,202 0 0	1,71,292 12 11	1,45,089 9 11	26,203 3 0
Cuddapah, North	Do.	16,184 0 0	77,626 6 9	93,810 6 9	73,151 9 9	20,658 13 0
Do. South	Do.	1,12,648 2 11	61,541 5 9	1,74,189 8 8	1,69,469 5 8	4,637 3 0
					(*b*) 83 0 0	
	Total ..	3,44,111 1 4	6,28,692 12 10	9,72,803 14 2	(*c*) 7,80,061 4 1 + 103 0 0 (*d*) — 1,422 0 0	(*e*) 1,92,639 10 1

Fourth Circle.							
Direction	Timber and other forest produce.	..	2,534 11 10	2,534 11 10	2,534 11 10	..	
	Do.	4 12 0	90,880 6 3	90,885 2 3	90,885 2 3	..	
Chittoor	Do.	1,024 0 0	3,52,517 3 5	3,53,541 3 5	3,50,857 15 5	2,683 4 0	
Vellore	Do.	379 0 0	1,53,159 7 5	1,53,538 7 5	1,53,224 13 5	313 10 0	
Salem, North	Do.	155 0 0	1,71,972 7 5	1,72,127 7 5	1,71,408 13 0	718 10 5	
Do. Central	Do.	940 9 0	1,13,874 3 4	1,14,814 12 4	1,14,714 12 4	100 0 0	
Do. South	Total ..	2,503 5 0	8,84,938 7 8	8,87,441 12 8	8,83,626 4 3 (a) —9,328 0 0	(b) 3,815 8 5	
Fifth Circle.							
Direction	Timber and other forest produce.	..	22 8 0	22 8 0	22 8 0	..	
	Do.	4,949 13 0	2,12,036 7 6	2,16,986 4 6	2,14,539 1 3	2,447 3 3	
Kollegal	Do.	45,447 11 0	2,15,031 9 1	2,60,479 4 1	(a) 2,13,368 8 1 (b) 15,135 10 0	31,975 2 0	
Coimbatore, North ..	Do.	(e) 1,19,289 6 0	2,22,593 13 5	3,41,883 3 5	(f) 2,60,966 11 5	(g) 80,916 8 0	
Do. South ..	Do.	1,03,615 14 10	2,04,732 13 6	3,08,348 12 4	2,08,886 7 11 (c) 722 1 8	98,740 2 9	
Madura	Do.	2,929 0 0	1,63,720 7 4	1,66,649 7 4	(d) 1,64,274 6 4	2,375 1 0	
Tinnevelly	Do.	..	17,086 1 5	17,086 1 5	17,086 1 5	..	
Tanjore	Total ..	2,76,231 12 10	10,35,223 12 3	13,11,455 9 1	(i) 10,95,001 8 1 (j) —2,204 0 0	(h) 2,16,454 1 0	
Sixth Circle.							
Mangalore, North ..	Timber and other forest produce.	14,345 14 9	97,715 12 9	1,12,061 11 6	86,899 0 0 (a) + 28 0 0	25,144 11 6	
	Do.	60,784 13 1	1,57,649 11 4	2,18,434 8 5	1,83,540 0 0	34,894 8 5	
Do. South ..	Do.	1,17,280 14 0	3,16,412 5 6	4,33,693 3 6	3,73,983 0 0	59,710 3 6	
Wynaad	Do.	26,145 8 10	93,851 1 1	1,19,996 9 11	1,00,305 0 0	19,691 9 11	
The Nilgiris	Do.	1,20,226 6 0	2,83,073 8 0	4,03,299 14 0	(b) 2,53,926 0 0 (a) + 4 0 0	1 49,369 14 0	
Palghat							

Revenue received and outstandings on account of revenue during the year 1930-31—*cont.*

District	Particulars.	Outstandings at commencement of the year.	Value of sales and other revenue during the year.	Total.	Amount realized during the year.	Balance due to the department at the end of the year.
Sixth Circle—cont.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Nilambur	Timber and other forest produce	..	1,26,650 0 0	1,26,650 0 0	1,26,650 0 0	..
Direction	Do.	..	1,245 0 0	1,245 0 0	1,245 0 0	..
	Total ..	3,38,783 8 8	10,76,597 6 8	14,15,380 15 4	(*c*) 11,26,570 0 0 (*e*) — 3,161 0 0	(*d*) 2,88,810 15 4
Add—						
Parlakimedi Maliahs ..	..	..	..	..	44,481 0 0	..
Golgonda Agency ..	..	..	..	..	5,399 0 0	..
Working Plan Circle ..	..	..	..	..	1,288 0 0	..
Forest Engineering Branch.	..	..	..	..	9,159 0 0	..
Forest College	..	..	..	..	55,672 0 0	..
Chief Conservator ..	..	..	..	..	— 3,598 0 0	..
Loss or gain by exchange.	..	..	..	..	— 94 0 0	..
					47,38,287 0 0	
					(*a*) — 16,736 0 0	
					(*b*) — 38,171 0 0	
					46,83,380 0 0	
					(*c*) + 14 0 0	
	Grand Total, Presidency.	10,62,676 5 11	43,50,243 9 10	54,12,919 15 9	46,83,394 0 0	7,86,835 15 4

Note for First Circle.

(*a*) Includes a portion of refunds (Rs. 5,409) but excludes revenue realised in Parlakimedi Maliahs (Rs. 44,481) and Golgonda Agency (Rs. 5,399).
(*b*) Deduct a portion of refunds (Rs. 621) not taken into account.
(*c*) Out of this, Rs. 20,595 fell due within the year 1930-31.

Note for Second Circle.

(*a*) Written off in Conservator's No. A 1-1031/30, dated 5th June 1930.
(*b*) This amount was ordered to be eliminated from Form No. 10 on account of wrong demand, in Conservator's No. A 1-433-30, dated 20th July 1930.
(*c*) Excludes Rs. 771 being the value of sandalwood realized in Vellore division.
(*d*) Deduct refunds (Rs. 1,422) not taken into account.
(*e*) Out of this amount the sum of Rs. 1,58,363-4-0, falls due after 31st March 1931.

Note for Fourth Circle.

(*a*) Deduct refunds (Rs. 9,328) not taken into account.
(*b*) There are no outstandings on account of sales effected by the Forest Utilization Officer.

Note for Fifth Circle.

(*a*) Includes Rs. 480 relating to Madras Forest College and Rs. 2,024 to the Nilgiris.
(*b*) Value of produce written off.
(*c*) Amount deleted.
(*d*) Includes a sum of Rs. 1,763 relating to sandalwood revenue realized in the IV Circle.
(*e*) Includes Rs. 96,255-12-0 outstanding against Railways and not Rs. 97,721-0-6 as shown as closing balance in the last year's return.
(*f*) Includes Rs. 1,47,033-11-0 realized by the Forest Utilization Officer.
(*g*) Includes Rs. 63,948 outstanding, as per Forest Utilization Officer's Return No. 1927-31 B-1, dated 20th April 1931.
(*h*) Out of this, a sum of Rs. 16,943-8-8 represents overdues, which includes Rs. 10,044-10-9 due from contractor A. Subba Pillai. The collection of this amount is kept in abeyance pending orders on his letter-patent appeal to the High Court.
(*i*) Includes a portion of refunds (Rs. 5,187).
(*j*) Deduct a portion of refunds (Rs. 2,204) not taken into account.

	Rs.	A.	P.	Rs.	A.	P.
Total revenue realized as shown in Form No. 41				10,95,001	8	0
Deduct—						
Amount written off	15,857	11	8			
Sandalwood revenue relating to Tinnevelly realized in the IV Circle and excluded in Form No. 39.	1,763	0	0			
				17,620	11	8
Net total ..				10,77,380	12	5

or

Rs. 10,77, 381 against Rs. 10,77,382 shown in Form No. 39.
The difference of Re. 1 is due to rounding off.

Note for Sixth Circle.

(*a*) Written off.
(*b*) Includes Rs. 13,200 realized by the Forest Engineer, Chenat Nair.
(*c*) Includes Rs. 2,301 realized by the Forest Engineer, Saw Mills, Rs. 2693 realized by the Forest Utilization Officer and Rs. 2,356 realized in the Fifth Circle.
(*d*) Of the total outstandings, Rs. 35,989-10-7 fell due within the year.
(*e*) Deduct refunds (Rs. 3,161) not taken into account.

	Rs.	Rs.	
Total revenue realized as shown in Form 41		11,26,570	
Deduct—			
Revenue collected outside the circle—			
Fifth circle—Sandalwood	1,670		
Minor forest produce (ivory)	336		
Minor forest produce purchasers	350		
Chenat Nair concern	13,200		
Forest Engineer (Saw mills)	2,301		
Beypore tope	2,693		
		20,550	
Net total ..		11,06,020	(This is the figure shown in Form No. 39).

General—
(*a*) Refund not taken into account in the various circles.
(*b*) Deducted on account of double adjustments in the Fifth and Sixth circles (Rs. 17,621 in the Fifth Circle and Rs. 20,550 in the Sixth).
(*c*) Added to represent the difference due to rounding off.

ANNUAL FORM No. 42.

Forest Department, Madras Presidency.

Financial results for the year 1930–31.

District.	Timber and other produce removed from the forest by Government Agency.		Other revenue.		Formation, protection and improvements of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
First Circle.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Ganjam	25,515	16,760	75,060	84,470	74,706	1,00,575	1,75,936
Vizagapatam ..	12,406	8,377	41,329	38,404	8,878	53,735	55,659
Godavari, Upper.	3,060	22,772	37,708	60,143	38,898	40,768	1,21,813
Do. Lower.	2,562	10,038	2,57,961	94,060	30,234	2,60,523	1,34,332
Guntur	447	2,282	1,56,678	71,991	7,647	1,57,125	81,920
Nellore	7,066	16,278	1,26,339	54,274	9,576	1,33,405	80,128
Total ..	51,056	76,507	6,95,075	4,03,342	1,69,939	7,46,131 (*a*) — 6,030	6,49,788
Net ..	..	..	..	..	..	..	..
Second Circle.							
Anantapur ..	(*a*) 1,089	218	2,20,978	62,913	20,022	2,22,067	83,153
Kurnool, East ..	1,345	1,310	52,070	56,103	20,083	53,415	77,496
Do. South.	13,514	5,175	1,03,498	66,975	21,948	1,17,012	94,038
Do. West ..	3,973	1,553	1,41,066	86,793	31,301	1,45,039	1,19,647
Cuddapah, North	145	46	72,821	59,847	20,511	72,966	80,404
Do. South.	(*b*) 4,963	1,533	1,64,280	70,677	22,696	1,69,243	94,906
Total ..	25,029	9,775	7,54,713	4,03,308	1,36,561	7,79,742 (*c*) — 332	5,49,644
Fourth Circle.							
Chittoor	4,415	2,580	86,470	75,634	19,025	90,885	97,239
Vellore	80,009	25,521	2,70,851	1,27,230	33,249	3,50,860	1,86,000
Salem, North ..	78,951	35,200	74,270	64,762	(*c*) 40,407	1,53,224	1,40,369
Do. Central ..	6,148	3,681	1,65,260	79,334	15,442	1,71,408	98,457
Do. South ..	8,600	5,649	1,06,114	64,014	17,558	1,14,714	87,221
Total ..	1,78,126	72,631	7,02,965	4,10,974	1,25,681	(*a*) 8,81,091 (*b*) — 9,328	6,09,286
Fifth Circle.							
Kollegal ..	1,40,226	25,301	74,318	56,516	36,496	2,14,544	1,18,313
Coimbatore, North.	99,693	33,624	1,11,530	73,166	25,144	2,11,223	1,31,934
Do. South.	1,68,429	83,957	92,188	48,956	73,280	2,60,617	2,06,193
Madura	1,560	3,033	2,07,331	98,384	33,427	2,08,891	1,34,844
Tinnevelly ..	10,464	11,242	1,53,814	64,210	18,577	1,64,278	94,029
Tanjore	..	104	17,089	1,780	218	17,089	2,102
Total ..	4,20,372	1,57,261	6,56,270	3,43,012	1,87,142	(*a*) 10,76,642 (*b*) — 2,204	(*c*) 6,87,415

Note for the First Circle—(*a*) Refunds.

Note for the Second Circle—(*a*) Includes the sum of Rs. 661 being the value of sandalwood realized in Vellore division. (*b*) Includes the sum of Rs. 110 being the value of sandalwood realized in Vellore division. (*c*) Deduct refunds not taken into account by the Conservator.

Note for the Fourth Circle—(*a*) Excludes Rs. 2,535 sandalwood revenue relating to other circles. (*b*) Refunds. (*c*) Includes Rs. 14,646 spent on the investigation of spike disease in sandal by the Indian Institute of Science, Bangalore, under S. c ii. Research.

Note for the Fifth Circle—(*a*) Includes Rs. 1,763 being sandalwood revenue realized in the IV Circle and excludes Rs. 480 relating to the Forest College and Rs. 2,024 relating to the Nilgiris. (*b*) Deduct Rs. 2,204 being a portion of refunds not taken into account. (*c*) Includes Rs. 3,704 being loss on Government commercial undertakings.

Financial results for the year 1930-31—*cont.*

District.	Timber and other produce removed from the forests by Government agency.		Other revenue.		Formation, protection and improvements of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts	Charges.
Sixth Circle.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Mangalore, North	45,341	58,184	41,628	32,150	15,319	86,969	1,05,653
Do. South.	1,44,861	1,06,589	39,042	22,639	18,293	1,83,903	1,47,521
Wynaad	3,45,058	3,45,488	26,701	15,084	60,751	3,71,759	4,21,323
The Nilgiris ..	50,002	95,280	51,286	9,522	35,425	1,01,288	1,40,227
Palghat	1,36,941	1,89,716	1,03,841	9,499	30,857	2,40,782	2,30,072
Nilambur	(*a*)1,23,621	(*a*)40,179	..	..	..	1,26,368	71,243
	2,693	21,720	..	..	..	..	..
	54	4,497	..	..	..	..	..
		4,847	..	..	..	..	..
Chenat Nair ..	13,200	46,035	..	..	..	13,200	46,035
Forest Engineer ..	2,301	..	..	..	..	2,301	..
Inspector of Live-stock.	..	7,709	..	..	..	..	7,709
Total ..	8,64,072	9,20,244	2,62,498	88,894	1,60,645	(*c*)11,26,570 (*b*) — 3,161	(*d*)11,69,788
Parlakimedi Maliahs.	..	..	..	..	..	44,481	41,757
Golgonda Agency.	..	..	..	..	..	5,399	9,821
Forest Engineering Branch.	..	..	..	..	..	9,159	— 27,798
Forest College ..	..	..	..	..	..	55,672	79,857
Working Plans Circle.	..	..	..	..	..	1,288	2,22,888
Chief Conservator.	..	..	..	..	..	— 3,598	1,12,524
Forest Research Officer.	..	..	..	..	..	..	37,635
Chenchu Officer ..	..	..	..	..	..	..	27,158
Expenditure in England.	..	..	..	..	..	..	1,64,280
Loss gained by exchange	..	..	..	..	..	— 94	1,844
	..	..	..	..	..	47,22,483	43,35,882
Deduct—	..	..	..	..	..	..	(*d*)—82,559
Refunds (not taken into account).	..	..	..	..	..	21,055	(*e*)+23,185
	..	..	..	..	..	47,01,428	(*f*)+ 598
	..	..	..	..	..	(*a*)— 20,550	(*g*) —2,971
	..	..	..	..	..	(*b*)+ 2,504	(*h*) +5,423
	..	..	..	..	..	..	(*i*) + 303
	..	..	..	..	..	..	42,79,861
	..	..	..	..	..	46,83,382	(*j*) — 80
	..	..	..	..	..	(*c*)+ 12	..
	..	..	..	..	..	46,83,394	42,79,831

Note for the Sixth Circle—(*a*) Figures represent revenue and expenditure for the whole division. (*b*) Deduct refunds (Rs. 3,161) not taken into account. (*c*) Revenue and expenditure of Direction have been apportioned amongst divisions. (*d*) Refunds due to previous years' recovery of charges taken under Miscellaneous receipts.

General—(*a*) Deducted on account of double adjustments in the Sixth Circle and the Forest Engineering Branch. (*b*) Added to represent the revenue relating to the Forest College (Rs. 480) and the Nilgiris (Rs. 2,024). (*c*) Added to represent the difference due to rounding off. (*d*) Deducted on account of double adjustments in the Sixth Circle and the Engineering Branch. (*e*) Represents expenditure booked against the Chief Conservator. (*f*) Represents expenditure on chenchu works. (*g*) Deducted on account of double adjustments made in the First Circle and against the Chief Conservator. (*h*) Represents expenditure on works in the Forest College. (*i*) Represents expenditure not shown in the Fifth Circle. (*j*) Deducted to tally with the Accountant-General's actuals.

ANNUAL FORM No. 43.

Forest Department, Madras Presidency.

PART I.

Statement of live-stock (1) elephants and (2) other live-stock during 1930-31.

District.	On hand at the commencement of the year.		Number received during the year.	Number disposed of during the year.	On hand at the end of the year.		Total expenditure on maintenance during the year.
	Number.	Value.			Number.	Value.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) ELEPHANTS.		RS.				RS.	RS. A. P.
First Circle.							
Godavari, Upper..	2	6,204	..	..	2	6,204	(a)2,225 0 0
Do. Lower..	1	2,500	..	..	1	2,500	755 0 0
Total ..	3	8,704	..	..	3	8,704	2,980 0 0
Second Circle.							
Kurnool, West ..	2	4,000	..	..	2	4,000	(b) 2,134 5 0
Total ..	2	4,000	..	..	2	4,000	2,134 5 0
Fourth Circle—Nil.							
Fifth Circle.							
Coimbatore, South.	26	66,500	13	5	34	76,850	37,317 0 0
Total ..	26	66,500	13	5	34	76,850	37,317 0 0
Sixth Circle.							
Mangalore, North.	4	8,200	3	..	7	12,200	5,074 11 6
Do. South.	13	23,950	1	2	12	24,400	10,921 4 9
Wynaad	32	66,500	12	7	37	79,900	32,712 0 0
Nilambur	27	78,450	3	8	22	70,500	24,082 0 3
Nilgiris	9	19,700	5	3	11	22,400	5,649 0 4
Palghat	5	13,300	2	3	4	10,000	6,523 0 0
Total ..	90	2,10,100	26	23	93	2,19,400	84,962 0 10
Grand Total, Presidency.	121	2,89,304	39	28	132	3,08,954	1,27,393 5 10
(2) OTHER LIVESTOCK.							
First Circle.							
Nellore	1	40	..	..	1	40	38 0 0
Total ..	1	40	..	..	1	40	38 0 0
Second Circle.							
Anantapur ..	2(c)	75	..	..	2	75	20 0 0
Total ..	2	75	..	..	2	75	20 0 0

(a) Out of this, Rs. 892 is debitable to Revenue department.
(b) Out of this, Rs. 960 represents pay of establishment.
(c) Buffaloes.

Statement of live-stock (1) elephants and (2) other live-stock during 1930-31—*cont.*

District.	On hand at the commencement of the year.		Number received during the year.	Number disposed of during the year.	On hand at the end of the year.		Total expenditure on maintenance during the year.
	Number.	Value.			Number.	Value.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Rs.				Rs.	Rs. A. P.
(2) OTHER LIVE-STOCK—*cont.*							
Fourth Circle.							
Chittoor	1	15	..	..	1	15	30 1 0
Total ..	1	15	..	..	1	15	30 1 0
Fifth Circle—Nil.							
Sixth Circle.							
Wynaad	9	799	..	..	9	799	1,545 0 0
Nilambur	24	1,720	4	6	22	1,680	6,059 12 5
Nilgiris	4	305	..	..	4	305	1,378 12 8
Palghat	4	440	..	4	..	..	384 0 0
Total ..	41(*b*)	3,264	4(*a*)	10 (*a*)	35(*c*)	2,784	9,367 9 1
Grand Total, Presidency.	45	3,394	4	10	39	2,914	9,466 10 1

(*a*) Buffaloes. (*b*) 32 buffaloes, 4 bulls and 5 asses. (*c*) 26 buffaloes, 4 bulls and 5 asses.

PART II.

Statement of elephants gone off the list during the year 1930-31.

District.	Names.	When purchased or otherwise obtained by Government.	Age.	How disposed of.
		First Circle—Nil.	YRS.	
		Second Circle—Nil.		
		Fourth Circle—Nil.		
		Fifth Circle.		
South Coimbatore.	1. Marudu ..	Captured on 14th August 1904 ..	26	Died on 29th April 1930.
	2. Seeta ..	Do 23rd August 1926 ..	24	Do .8th March 1931.
	3. Damayanthi.	Do. 13th October 1929 ..	..	Do. 29th December 1930.
	4. Gomathy (calf of Kanthimathi).	Born on 27th December 1930 ..	1 month	Do. 30th January 1931.
	5. Leela ..	Captured on 16th August 1929 ..	2½	Do. 13th April 1930..
		Sixth Circle.		
South Mangalore.	Sarojini ..	Born to Netrarati 11th February 1929.	1	Sold.
	Sridaran ..	Born to Maharani 27th October 1929.	1½	Died.
Wynaad.	Devamaji ..	Captured on 3rd February 1926 in Coorg and purchased.	29	Transferred to North Mangalore.
	Rukmani ..	Captured on 22nd May 1926 ..	22	Do.
	Krishnaveni.	Do. 17th January 1930..	2	Sold.
	Sarasvathi ..	Do. 18th January 1930..	7	Do.
	Sundari ..	Do. 9th April 1930 ..	1½	Do.
	Blind tusker.	Do. 5th May 1930 ..	1	Shot dead.
	Calf ..	Do. 23rd February 1931.	1	Bolted.
Nilambur.	Libera ..	Do. 7th March 1909 ..	36	Transferred to Wynaad.
	Kali ..	Do. 12th January 1919..	34	Do.
	Krishna ..	Do. 30th March 1916 ..	29	Do.
	Chandramathi.	Do. 22nd February 1927.	48	Do.
	Gajothaman.	Born to Jhelom on 6th January 1929.	2	Sold.
	Nargish ..	Born to Godavari on 2nd May 1929.	2	Transferred to Wynaad.
	Susheela ..	Captured on 27th December 1929.	5	Presented to Australian Zoo.
	Rajkumar ..	Do. 10th April 1930 ..	1½	Died.
Nilgiris ..	Kuttikrishna.	Do. 13th January 1930..	7	Transferred to Wynaad.
	Kumaran ..	Do do. ..	1½	Sold.
	Chandra ..	Do. 15th March 1930 ..	2	Presented to Australian Zoo.
Palghat ..	Nitthyan ..	Do. 26th January 1928..	13	Transferred to Nilambur.
	Dowlat ..	Do. 6th January 1931..	1	Sold.
	Farhat ..	Do. 5th February 1931.	1	Do.

ANNUAL FORM No. 44.

Forest Department, Madras Presidency.

Abstract showing the value of stores, tools and plant for 1930–31.

ANNUAL FORM No. 44.

Forest Department, Madras Presidency.

Abstract showing the value of stores, tools and plant for 1930-31.

District.	Stores.						Difference.	
	On hand at the commencement of the year.		Additions or exclusions during the year.		On hand at the end of the year.		In favour of the year.	Against the year.
	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Value.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
First Circle.		Rs.		Rs.		Rs.	Rs.	Rs.
Direction	314	5,032	3	39	317	5,071	39	..
Ganjam	5,689	1,59,721	108 (a) 1,276	337 2,024	4,521	1,58,034	..	1,687
Vizagapatam	1,706	8,521	23 (a) 158	579 272	1,571	8,828	307	..
Upper Godavari	(b) 4,266	(b) 18,540	62 (a) 105	574 291	4,223	18,823	283	..
Lower Godavari	3,018	35,482	157 (a) 147	1,723 382	3,028	36,823	1,341	..
Guntur	6,430	15,443	409 (a) 1,041	1,463 1,685	5,798	15,221	..	222
Nellore	60,876 + 9 miles of tram.	(c) 74,650	52 (a) 22,602	480 5,235	38,326 + 9 miles of tram.	69,895	..	4,755
Total ..	82,299 + 9 miles of tram.	3,17,389	814 (a) 25,329	5,195 9,889	57,784 + 9 miles of tram.	3,12,695	..	4,694
Second Circle.								
Direction	378	6,432	+ 18 — 1	+ 145 — 10	395	6,567	135	..
Anantapur	4,883	12,641	— 927 ..	— 965	3,956	11,676	..	965

Kurnool, East	3,648	16,143	+ 346 — 373	+ 1,427 — 467	3,621	17,103	960	..
Do. South	2,307	15,825	+ 1,552 — 210	+ 1,791 — 887	3,649	16,729	904	..
Do. West	7,342	25,368	+ 21 — 966	+ 793 — 1,159	6,397	25,002	..	366
Cuddaph, North	3,905	13,297	+ 99 — 89	+ 435 — 360	3,915	13,372	75	..
Do. South	3,505	15,992	+ 13 — 59	+ 926 — 328	3,459	16,590	598	..
Total ..	25,968	1,05,698	+ 2,049 — 2,625	+ 5,517 — 4,176	25,392	1,07,039	1,341	..
Fourth Circle.								
Direction	225½	* 7,494	(a) 1	26	226½	7,520	26	..
Chittoor	4,008	11,792	(a) 435 (b) 426	2,413 855	4,017	13,350	1,558	..
Vellore	8,113	28,104	(a) 473 (b) 196	1,651 742	8,390	29,013	909	..
Salem, North	3,993	19,593	(a) 232 (b) 237	2,157 1,098	3,988	20,652	1,059	..
Do. Central	3,685	13,413	(a) 267 (b) 310	1,301 623	3,642	14,091	678	..
Do. South	4,049½	12,325	(a) 250 (b) 330	3,278 1,431	3,969½	14,172	1,847	..
Total ..	24,074	92,721	+ 1,658 — 1,499	+ 10,826 — 4,749	24,233	98,798	6,077	..

* Correct figure.

Note for First Circle. (a) Represents exclusions.
(b) Revised figures furnished by District Forest Officer, Upper Godavari.
(c) Revised value now furnished by District Forest Officer, Nellore.

Note for Second Circle.— Nil.

Note for Fourth Circle. (a) Additions and revaluations.
(b) Written off, transferred or otherwise disposed of.

Abstract showing the value of stores, tools and plant for 1930-31—*cont.*

District.	Stores.						Difference.	
	On hand at the commencement of the year.		Additions or exclusions during the year.		On hand at the end of the year.		In favour of the year.	Against the year.
	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Value.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Rs.		Rs.		Rs.	Rs.	Rs.
Fifth Circle.								
Direction	230	2,397	42 4	(a) 252 (b) 75 (c) 438	268	3,012	615	..
Kollegal	2,611	9,348	122 99	(a) 539 (b) 184	2,634	9,703	355	..
North Coimbatore	(d) 3,312	13,180	184 57	(a) 959 (b) 95 (c) 318	3,439	14,362	1,182	..
South Coimbatore	3,112	52,970	1,581	(a)28,241 (b)28,687 (c) 5,318	4,693	57,842	4,872	..
Madura	3,372	9,879	300 147	(a) 704 (b) 68	3,525	10,515	636	..
Tinnevelly	3,620	14,510	205 133	(a) 1,700 (b) 460	3,692	15,750	1,240	..
Vernacular Training School ..	447	388	53	(b) 79	394	309	..	79
Total ..	16,704	1,02,672	1,941	8,821	18,645	1,11,493	8,900	79
Sixth Circle.								
Direction	430	6,870	25 — 64	49 118	391	6,801	..	69
North Mangalore	1,694	12,750	158 — 79	1,859 908	1,773	13,701	951	..
South Mangalore	2,973	19,111	1,362 — 234	27,509 1,922	4,101	44,698	25,587	..
Wynaad	3,705	24,012	1,571 — 569	21,361 1,878	4,707	43,495	19,483	..

Nilambur	2,109	19,231	— 665	3,042	2,566	18,693	...	538
			— 208	3,580				
The Nilgiris	1,579	13,708	— 230	549	1,622	13,763	55	..
			— 187	494				
Palghat	1,720	10,575	— 366	1,886	1,984	12,249	1,674	..
			— 102	212				
Forest Engineer	10,356	2,02,246	— 330	1,496	9,188	2,00,118	..	2,128
			— 1,498	3,623				
Total ..	24,566	3,08,503	4,707	57,750	26,332	3,53,518	45,046	..
			— 2,941	12,736				
Forest Utilization division ..	153	1,640	* 4	1,644	157	3,284	1,644	..
Forest College	7,339	50,689	— 60	+ 1,215	7,279	51,905	1,471	256
Parlakimedi Maliahs	876	5,685	18	112	894	5,797	112	..
Grand Total, Presidency ..	1,81,979	9,84,998	11,191	91,080	1,60,716	10,44,529	59,531	..
			— 32,454	— 31,549				

Note for Fifth Circle.—

(*a*) Additions. (*b*) Exclusions. (*c*) Revaluations. (*d*) Difference due to omission in last year's return.

N.B.—The figures of Forest Engineer, Coimbatore, are included in accordance with Chief Conservator's Reference No. 5252 C-2-29-2, dated 24th August 1929, and omitted to be included last year.

	Rs.
* Additions, 56	1,964
Exclusions, 52	320

15.FEB. 32

ADMINISTRATION REPORT

OF THE

FOREST DEPARTMENT

OF THE

MADRAS PRESIDENCY

FOR THE

YEAR ENDING 31st MARCH 1931

VOL. II — 1930-31

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ANNUAL ADMINISTRATION REPORT OF THE FOREST DEPARTMENT

FOR THE

YEAR ENDING 31ST MARCH 1931

FIRST CIRCLE

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

1. (i) *Reserved forests.*—The total area of reserved forests decreased from 4,054 square miles to 3,981 square miles chiefly due to the transfer of the Kanigiri range from Nellore to the Kurnool South division of the Second Circle.

(ii) *Reserved lands.*—The total area of reserved lands increased from 15 square miles to 62 square miles due to the notification under section 4 of six blocks of 17·73 square miles in Upper Godavari and of nine blocks of 29·21 square miles in Rampa (Lower Godavari).

2. Forest Settlement.

2. Draft notifications under section 16 in respect of Bologonda and Bandapalli blocks in Rampa and of Repaka extension in Upper Godavari were received during the year and are still under correspondence.

3. Demarcation.

3. An expenditure of Rs. 5,101 was incurred on the demarcation of blocks proposed for reservation in—

	MILES.
Ganjam (Balliguda Agency)	40
Godavari Upper	3
Godavari Lower (Rampa)	126
	169

In Lower Godavari, the boundaries of the notified blocks in Rampa were cleared and maintained at a cost of Rs. 1,014. In Guntur the erection of stone cairns in the place of mud cairns round Aduvuladivi reserved forest was done at a cost of Rs. 274.

In Nellore about 2¼ miles of boundary of the Sathiavedu reserved forest was demarcated with granite pillars at a cost of Rs. 94 thus completing the demarcation of this reserve. A length of 5½ miles of the boundary of Nagalapuram reserved forest was demarcated at a cost of Rs. 111.

The reclearance of boundaries was, as usual, done by the subordinates free of cost or as a part of the scheme for fire-protection.

Fifty-eight miles of frontier boundaries were inspected by the District Forest Officer and the Extra Assistant Conservator in Upper Godavari.

4. Forest Surveys.

(*a*) *By the Madras Survey Party.*

4. In Lower Godavari the Madras Survey Party continued to send sketches of the external boundaries of reserved forests named below in Peddapur, Gokavaram and Polavaram ranges. These were duly verified :—

Peddapur	...	Anantaram. Raghavapatnam. Sarlanka. Vuligogula. Mallavaram.
Gokavaram	...	Sudikonda. Molleru. Lakkonda. Thirumalayapalem.
Polavaram	...	Bedadavole. Marlagudem. Kovvada block II. Kopalli.

A discrepancy in respect of the external boundary of Upputeru block II was investigated by the Assistant Director of Survey, No. I Survey Party, and according to his decision a fresh land complaint is being filed.

(*b*) *By the Survey of India Party.*

Ganjam.—The survey on 4-inch scale of Galleri extensions was undertaken towards the close of the year The work was not completed.

Upper Godavari.—A topographical survey on 1-inch scale was carried out in the Bhadrachalam taluk.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

5. *Preparation and control of working plans.*—No new working plans were sanctioned during the year.

Ganjam.—The revised working plan for the Ghumsur forests prepared by the Working Plans branch was completed and is awaiting sanction. The prescriptions of this revised plan were followed during the year.

The Mohiri forests of Berhampur range continued to be worked according to the scheme of 1922.

Vizagapatam.—The prescriptions of the sanctioned working plans were generally adhered to with minor exceptions.

The revision and consolidation of the working plans is being taken up by the District Forest Officer.

Upper Godavari.—The working schemes sanctioned by the Conservator were in force during the year. Details for part 1 of a working plan for the whole division are being gathered.

Lower Godavari.—The revision and consolidation of the working plans in the division was taken up by the Working Plans branch after the close of the year.

Guntur.—The draft working plan for the upland forests of Palnad, Vinukonda and Sattenapalle ranges called "the Guntur Upland Forests Working Plan" prepared by Mr. P. Venkataramanan was gone through by the Conservator in detail and returned to the District Forest Officer for revision in the light of the Chief Conservator's orders to include the provision for the removal of yepi (*Hardwickia binata*) leaves for fodder and for sheep grazing.

The working plan for the Repalle mangrove forests has not been taken up as it involves the stock-mapping of the actual growth of mada (*Avicennia officinalis*) in the different reserves.

Nellore.—The revised working plan for the forests in Sriharikota range was discussed in detail by Mr. Madan with the District Forest Officer who is redrafting it in the light of the instructions issued to him.

The prescriptions of the working plan sanctioned for the Sathiavedu range were generally followed. The revision of this plan will be taken up by the District Forest Officer after a personal discussion with the Conservator early in September 1931.

2. Communications and Buildings.

6. No new work costing over Rs. 5,000 was sanctioned during the year.

7. *Roads and bridges.*—The total expenditure on new works amounted to Rs. 11,274 while that on repairs, to Rs. 9,190.

The important works were—

Ganjam.—Construction of Tarasingi-Gayagonda road.

Vizagapatam.—Construction of 2 miles 9 furlongs of the Veeraghattam-Donubai road project.

Upper Godavari.—About two miles of cart-track in Walsugri and Sitarampuram reserved forests.

Lower Godavari.—Part-construction of Kachalur-Peddanuthula road.

8. *Buildings.*—The expenditure on new works amounted to Rs. 7,441 while on repairs, to Rs. 23,339.

The principal works were—

Ganjam.—Part-construction of forester's quarters at Tilasingi.

Upper Godavari.—Completion of the Range Officer's and clerk's quarters at Bhadrachalam.

Lower Godavari.—Improvements to the District Forest Officer's quarters at Cocanada.

Guntur.—Completion of the rest-house at Nizampatam.

9. *Other works.*—The expenditure of Rs. 579 on new works mainly represents the cost of deepening the well in the Narasapatam Range office compound (Vizagapatam) by hand-boring apparatus and of completing the well in the range quarters at Chintur (Upper Godavari).

Maintenance.—All the District Forest Officers except District Forest Officer, Ganjam, whose certificate is awaited, have certified that the roads and buildings have been properly cared for and that they have been kept in repair with the following exceptions:—

Lower Godavari.—Dawson road in Polavaram range; this has since been ordered to be abandoned.

Mulagalampalli rest-house due to delay in the submission of the estimate by the Range Officer.

Nellore.—Nagalapuram rest-house proposed to be demolished.

3. Protection of Forests.

(a) *General protection.*

10. The total number of offences reported during the year is compared with the number in the previous year in the statement below :—

—	1929-30.	1930-31.		
		By Forest officers.	By Revenue officers.	Total.
1. Injury to forests by fire	116	176	4	180
2. Unauthorized felling	2,932	1,883	851	2,734
3. ,, grazing	735	604	25	629
4. Other offences	312	95	111	206
Total ..	4,095	2,758	991	3,749

There is a decrease under all heads except under " Injury to forests by fire " which shows an increase. The decrease occurs principally in Ganjam, Lower Godavari and Guntur and is attributed to better protection, the organizing of patrol parties in Lower Godavari to put down firewood stealing and to the permission granted for the removal of yepi (*Hardwickia binata*) leaves in Guntur.

Special patrol parties were organized in Vizagapatam and Lower Godavari divisions and the result was satisfactory. No parties could be organized in Guntur as the staff of a beat could not be spared elsewhere lest the protection of that beat should suffer.

In respect of reserves, out of 734 cases disposed of in court conviction was obtained in 279 cases and 455 cases were treated as acquittals. Of the number treated as acquittals, in 401 cases compounding fees were paid in court. The percentage of successful prosecution was 97.

In respect of unreserves, out of 158 cases disposed of in court conviction was obtained in 98 cases and 60 cases were treated as acquittals. Of the number treated as acquittals, in 37 cases compounding fees were paid in court.

The total amount of compounding fees realized during the year was Rs. 32,184.

The percentage of offences enquired into by the District Forest Officers and Range Officers is given below:—

District.	By District Forest Officer. PER CENT.	By Extra Assistant Conservator. PER CENT.	Rangers. PER CENT.
Ganjam	...	11·4	64
Vizagapatam ...	3	...	15
Upper Godavari ...	2·04	...	43·2
Lower Godavari ...	0·25 (One case)	...	39
Guntur	2	...	5
Nellore	4	...	3·5

11. *Rewards.*—Rewards amounting to Rs. 145 were granted in Lower Godavari and Guntur to subordinates for special efforts made in detecting offences under difficult circumstances.

(*b*) *Protection from fire.*

12. Form No. 31 shows the areas attempted to be protected and those actually protected during the calendar year 1930. The number and origin of fires are given in Appendix A. Early burning was undertaken nowhere in the Circle. The area under special protection decreased from 920,135 acres in the previous year to 896,150 acres during the year due to the transfer of the Kanigiri range from Nellore to the South Kurnool division. The area burnt was 183,063 acres, the bulk of which 64,903 acres were in Nugur range of Upper Godavari which is difficult to protect as the reserved forest consists of steep hill sides where once the fire starts it is practically impossible to control it. The percentage of successful protection was 79·6 against 82 in the previous year due to the exceptionally severe hot weather of 1930. The cost of successful protection per square mile was Rs. 8–9–6 against Rs. 8–14–0 in the previous year. The area under general protection was 789,765 acres out of which 48,334 acres or about 6 per cent were burnt.

The Khonds in Ganjam assisted as usual in preventing and extinguishing fires for which they were given rewards in the shape of rice, etc., to the value of Rs. 198 against Rs. 248 in the previous year.

A sum of Rs. 806 was distributed to the Koyas and Reddis in Upper Godavari for the successful protection of forests against Rs. 2,307 in the previous year.

In Lower Godavari, the settlers of the Peddapur range were granted rewards amounting to Rs. 525 for successful protection and a sum of Rs. 146 was withheld as fines for bad protection.

The Koyas and Reddis of the Polavaram Agency failed again this year to earn any reward. Their indifference to the protection of forest still continues and steps will be taken after due warning to close areas badly damaged by fire.

(c) *Protection from cattle.*

13. The area open to grazing of all animals except goats (which were entirely excluded from reserves) was 2,262 square miles (69 per cent of the total area of reserved forests and lands) against 2,193 square miles in the previous year chiefly due to the addition of a large area under reserved lands. The area closed to browsers was 391 square miles or 12 per cent of the total area of reserved forests and lands.

The grazing incidence in the several districts was :—

District.	1929-30.	1930-31.
Ganjam	5·65	6·83
Vizagapatam...	5·00	6·00
Upper Godavari	4·57	4·20
Lower Godavari	2·43	2·27
Guntur	3·31	3·65

In Nellore, 91 kanchas out of 126 were sold at varying rates: 25 kanchas were sold on long lease and the remaining 66 on short lease. Thirty-five kanchas were not sold for want of demand. Eighteen of the unsold kanchas fall in Sathiavedu range where the villagers wanted to have the leases without limitation of the number of cattle or period of grazing, in violation of the fundamental principles of the kancha system. Their requests were not granted.

The number of cattle licensed to graze on payment was 319,281 against 344,684 in the previous year. The decrease is principally in Ganjam, Vizagapatam and Guntur and is attributed to cattle mortality and to late setting in of the monsoon.

The number of cattle impounded during the year was 8,294 against 11,240 in the previous year. The decrease is generally attributed to cattle disease which prevented cattle from resorting to the forests.

(d) *Protection against injuries from natural causes.*

14 *Lower Godavari.*—The teak plots suffered from the ravages of defoliators. There was no damage to casuarina seedlings by insects.

Guntur.—The destruction of prickly-pear by means of cochineal insect was tried in Muthayapalem and Kondapalli reserved forests in November 1930 and January 1931. The insect has established itself and the results are satisfactory. It is proposed to introduce the insect in other parts of the division.

Nellore.—The old Loranthus plot to note the season, rate of infection and kind of trees which are affected by this pest, and the plot to note rate of infection of viscum and whether infection affects crop of seeds of nux-vomica continued to be maintained and observations were recorded.

The destruction of prickly-pear by cochineal insect was undertaken in the Sriharikota Island in September 1930. After the cessation of the rains the infection spread extensively between 20th January and 20th February.

CHAPTER III.—SYLVICULTURE.

SECTION 1.—FORMATION AND REGENERATION OF FORESTS.

(i) *General progress of areas under regeneration.*

15. *Ganjam.*—Natural regeneration of sal in the clear-felled areas and of miscellaneous species in the fuel coupes continued to be satisfactory.

Vizagapatam.—Natural regeneration of sal in Palkonda range, and of important species in Dharakonda and Sanivaram reserved forests of Narasapatam range continued to be good.

Seedlings of *Bambusa arundinacea* are coming up profusely in Narasapatam range. *Dendrocalamus strictus* continued to seed sporadically in Dharakonda and Sanivaram reserves and its regeneration is good. Sporadic flowering of *Dendrocalamus strictus* was also observed in Antikonda and Burna reserved forests of Palkonda range.

Upper Godavari.—Artificial regeneration of teak was generally satisfactory. The seeding of teak and *Pterocarpus marsupium* and other important species was very poor.

Guntur.—Natural regeneration of mada (*Avicennia officinalis*) in the mangrove forests of Repalle range was fair. Natural reproduction of yepi (*Hardwickia binata*) and other species in the reserves of upland ranges was also fair; but, owing to hardness of soil and absence of moisture, the seedlings did not thrive well and few survived the hot weather.

(ii) *Establishment of reproduction under working plans or schemes.*

(*a*) Mainly natural.

16. In Ganjam, natural reproduction was considerably helped by such sylvicultural operations as tending, thinning, etc. In Vizagapatam coppice reproduction was good in felled coupes and especially in Palkonda range where it ousted the growth of grass, thus reducing the risk of fire. In Upper Godavari, advance regeneration fellings were conducted in five coupes (285 acres) which are due for final fellings five years later with a view to open up the canopy and to give more light to teak and terminalia seedlings and to promote seed-bearing and germination of valuable species. On the east of the Sabari the regeneration fellings have produced appreciable results as the operation has increased the natural regeneration of teak and *Terminalia tomentosa*; while on the west of the Sabari where the rainfall is poorer there were no noticeable improvements. In Peddamidisileru series—the westernmost portion—these fellings had no effect at all. Burning the areas which were subject to regeneration felling and broadcast sowing of teak seeds was started as an experimental measure in two series. Coppice reproduction in felled coupes was good.

Coppice reproduction in the felled coupes was good in Lower Godavari, Guntur and Nellore. Seedling regeneration in Sriharikota range was excellent especially of Memecylon, Maba and Atlantia.

(*b*) Mainly artificial.

17. *Upper Godavari.*—A brief account of the regeneration operations carried out in this division is given below :—

Modified Taungya Coupe I of Kansulur reserved forest (28 *acres*).—Casualties were replaced with teak stumps at the time of tending at a cost of Rs. 80.

Modified Taungya Coupe II of Lakkavaram reserved forest (24 *acres*).—Eighteen acres were ploughed twice and 6 acres once, in May 1930. Twenty-five thousand nine hundred and fifty-three stakes were planted at 6 feet intervals and teak seeds were dibbled in May 1930, ten seeds per stake. Casualties were replaced with 8,350 teak germinating seeds and 12,600 teak stumps in August and September 1930. Enumeration at the end of the hot weather of 1931 showed 11 per cent success from dibbling, 89 per cent from notching germinating seed, and 64 per cent from stump planting. The cost of the work was Rs. 107-8-0.

Modified Taungya Coupe III of Lakkavaram reserved forest (20 *acres*).—Valueless species and undergrowth were cut and burnt in January and March 1931 at a cost of Rs. 119.

Modified Taungya Coupe IV of Pulusumamidi reserved forest (30 *acres*).—Ten to fifteen teak seeds were dibbled at stakes over 5 acres in April 1930 and, maddi (*Terminalia tomentosa*), vegesi (*Pterocarpus marsupium*) and somi (*Soymida febrifuga*) seeds were dibbled at stakes over 6 acres in June 1930. In the same month, 12,000 teak stumps were planted over 10 acres. In July 1930, 6,000 teak seedlings were transplanted over 5 acres and 3,600 germinating teak seeds were notched over 4 acres. The espacement in all these cases was 6′ × 6′. Casualties were replaced with 850 teak stumps, 2,800 germinating teak seeds and 2,000 teak seedlings in July and August 1930. Enumeration at the end of the hot weather of 1931 showed as successful, 48 per cent in dibbling teak seeds, 82 per cent in stump planting of teak, 59 per cent in germinating teak seeds, 37 per cent in dibbling somi seeds (*Soymida febrifuga*), 20 per cent in dibbling vegesi (*Pterocarpus marsupium*) seeds, 31 per cent in dibbling maddi (*Terminalia tomentosa*) seeds. The operation cost Rs. 135.

Clear-felling in teak forest followed by artificial regeneration in patches deficient in teak was carried out in the following coupes. The dibbling of teak seeds in all these coupes was done with 10 to 12 seeds per stake, the espacement being 6′ × 6′.

Coupe III of Peddamidisileru reserved forest (25 *acres*).—Teak seeds were dibbled in April 1930. Casualties were replaced with 3,800 germinating teak seeds. In addition, somi (*Soymida febrifuga*) and yepi (*Hardwickia binata*) seeds were dibbled at stakes over 2 acres. The operation cost Rs. 11. Enumeration at the end of the hot weather of 1931 showed 50 per cent success over the area dibbled with teak. The somi and yepi dibbling was a complete failure due to the soil being gravelly.

Coupe VI of Dummugudem reserved forest (61·27 *acres*).—Fifteen thousand stakes were planted over 15 acres in April 1930 and teak seeds dibbled in April and May 1930. Casualties were replaced in July 1930 by notching germinating teak seeds. The cost of the operation was Rs. 40. The percentage of success was 27.

Coupe X of Tunikicheruvu reserved forest (45 *acres*.)—Eleven thousand five hundred and forty-six stakes were planted over 9 acres and teak seeds dibbled in May 1930. Maddi (*Terminalia tomentosa*) seeds were dibbled at stakes over 1½ acres. The operation cost Rs. 28–14–0. The percentage of success was 8.

Coupe X of Ramachendram reserved forest (54½ *acres*).—In April 1930, 9,125 stakes were planted over 7½ acres and teak seeds were dibbled at stakes. Casualties were replaced in July 1930 by notching 1,665 germinating teak seeds. The cost of the operation was Rs. 22 Percentage of success was 42.

Coupe VI of Sitarampuram reserved forest (31 *acres*).—In April 1930, 5,850 stakes were planted over 5 acres and teak seeds were dibbled. Casualties were replaced by notching 850 germinating teak seeds and by transplanting 100 teak seedlings. The cost of the operation was Rs. 12. The percentage of success was 50.

Coupe IV of Walsugri reserved forest (29 *acres*).—Teak seeds were dibbled in April 1930 over 5 acres. Casualties were replaced with 300 teak stumps and 2,000 germinating teak seeds. The cost of the operation was Rs. 9. The percentage of success was 27·5

Lower Godavari.—An area of 74 acres in Coupe VII of Kandikuppa reserved forest was planted up with casuarina at a cost of Rs. 1,279 in July 1930 from seedlings raised in nursery. Casualties occurred from November onwards owing to lack of rains, and were replaced.

The casualties in Coupe VI planted during the previous year were also replaced.

Guntur.—In the coupes worked in 1929–30 in Guttikonda and Mellavagu sections of Vinukonda range and in Venkatayapalem and Kondapalli reserved forests of Guntur range, the rubbish resulting from the fellings and the thorny species were gathered into heaps 15 to 25 feet in diameter and the heaps burnt in the hot months of May and June. The soil in the burnt patches was dug up and seeds of *Hardwikia binata, Albizzia lebbek, Albizzia amara, Azadirachta indica, Acacia Sundra and Sapindus trifoliatus* were sown broadcast as a mixture, germination was good in all the patches and the survivals at the end of the year were fairly large.

Nellore.—An area of 50 acres of Coupe II of the Casuarina Planting Series C in the Sriharikota range was planted with casuarina during the year at a cost of Rs. 1,203.

(*c*) Afforestation.

18. Nil.

(iii) *Plantations and other forms of regeneration not under working plans or schemes.*

19. *Lower Godavari—Peddapur range, Ammayagoppu valley.*—The plantation of 1928 is thriving well. The plants in the stumped and sown area are about 24 feet in height. Two or three of these flowered. Owing to lack of rains during the previous season there was not much appreciable growth.

In the plantation of 1929 (10 acres) the height growth in the uncultivated area of 1 acre was better than that in the area (1 acre) of one year under cultivation. Sowings over an area of 3 acres in this plantation were a failure due to lack of timely rains.

A third plot of 10 acres was clear-felled and burnt during the year and was prepared for regeneration during the rains of 1931–32.

Gokavaram range.—An experimental plot of 2 acres in each of Sudikonda, Tirumalayapalem and Mallavaram reserved forests was regenerated by dibbling teak seeds in patches at a cost of Rs. 116. The experiment proved a success.

Rajahmundry range.—Casuarina was planted over 2 acres on the Sandbar in Coringa Extension reserved forest at a cost of Rs. 62. The seedlings subsequently died owing to heavy gale and inundation by the sea.

Guntur.—Forty-five acres in Nizampatam reserved forest were planted with casuarina at an espacement of 7 feet to regenerate a sandy waste. The expenditure in 1930–31 was Rs. 1,583.

The planting was done between 28th June and 10th July 1930. The survivals in March 1931 were 31,000 seedlings and the success was nearly 80 per cent.

(iv) *Tending of Areas under regeneration.*

20. *Upper Godavari.*—Teak seedlings and coppice shoots were tended by cutting of weeds, climbers and regrowth of inferior species and of bamboos in all clear-felled and modified taungya coupes.

Lower Godavari.—The casuarina plantation in Coupe II of Kandikuppa reserved forest was thinned at a cost of Rs. 277 and that in 3·4 acres of casuarina plantation near Brahmasamudayam at a cost of Rs. 33. Cleaning side branches was done in Coupe III of Kandikuppa casuarina plantation and in 14·25 acres near Brahmasamudayam, at a cost of Rs. 71.

Weeding operations and working up of soil, etc., were done in the teak plots of Rajavomangi reserved forest at a cost of Rs. 109. Osurpad and Pakalagudem teak plots were tended at a cost of Rs. 27.

SECTION 2.—TENDING OF THE GROWING STOCK.

21. The following sylvicultural works were undertaken :—

Ganjam.—(1) Heaping and burning of refuse stuff and cutting switch growth in the following coupes :—

(*a*) Coupe XII-*a* and *b* (152 acres) of Plains Sal Timber Working Circle, Series I, in Gallery reserved forest at a cost of Rs. 568.

(*b*) Coupe XII-*a*, *b* and *c* (49 acres) of Plains Sal Timber Working Circle, Series II, in Kriamba reserved forest at a cost of Rs. 196.

(*c*) Coupe IX (96 acres) of Ravine Working Circle in Rambha reserved forest at a cost of Rs. 426 (Rs. 42 spent in May 1931).

(*d*) Coupe I (18 acres) of Ravine Working Circle in Kriamba reserved forest at a cost of Rs. 72.

(2) Cleaning operations were conducted in the following coupes :—

(*a*) Coupe X-*a* and *b* (134 acres) of Plain Sal Timber Working Circle, series I, in Galleri reserved forest at a cost of Rs. 339.

(*b*) Coupe XI-*a* and *b* (32 acres) of Plain Sal Timber Working Circle, Series II, in Kriamba reserved forest at a cost of Rs. 83.

(*c*) Coupe VIII-*a* and *b* (114 acres) of Ravine Working Circle in Rambha reserved forest at a cost of Rs. 103.

(*d*) Pole coupes in—

(i) Mojjogoda range over 146 acres at a cost of Rs. 139.

(ii) Russellkonda range over 709 acres at a cost of Rs. 696.

(iii) Bontha range over 171 acres at a cost of Rs. 170.

(iv) Buguda range over 342 acres at a cost of Rs. 324.

(v) Surada range over 427 acres at a cost of Rs. 396.

(3) Second cleaning was done in the following coupes :—

(*a*) Coupe X (138 acres) of Plains Sal Timber Working Circle, Series I, in Galleri reserved forest at a cost of Rs. 245.

(*b*) Coupe X-*d* (19 acres) of Plains Sal Timber Working Circle, Series II, in Kriamba reserved forest at a cost of Rs. 24.

(*c*) Coupe VII (42 acres) of Ravine Working Circle in Rambha reserved forest at a cost of Rs. 79.

(*d*) Coupe VI-*a*, *b* and *c* (47 acres) of Ravine Working Circle in Rambha reserved forest at a cost of Rs. 53.

(4) Thinnings were done in—

(*a*) Coupe IV-*a*, *b*, *c* and *d* (153 acres) of Plains Sal Timber Working Circle, Series I, in Chendragiri reserved forest at a cost of Rs. 145.

(*b*) Coupe IV-*a*, *b*, *c*, *d*, *e*, *f*, *g* and *h* (47 acres) of Plains Sal Timber Working Circle, Series II, in Kriamba reserved forest at a cost of Rs. 40.

(c) In Pole coupes—

(i) Russellkonda range over an area of 241 acres at a cost of Rs. 255.

(ii) Bontha range over an area of 58 acres at a cost of Rs. 57.

(iii) Buguda range over an area of 94 acres at a cost of Rs. 100.

(iv) Surada range over an area of 101 acres at a cost of Rs. 104.

(v) Pondakhol range over an area of 126 acres at a cost of Rs. 126.

(5) Fourth-year climber-cutting and some special climber-cutting operations, where needed, were also carried out.

Vizagapatam.—In areas not actually under regeneration, climber-cutting was done by the beat subordinates free of cost and by the coupe contractors in the current felling areas. Climber-cutting in sal areas was done where it was needed.

Upper Godavari.—Congested patches of teak in Teak Clear-felled Coupe III of Ramachendram reserved forest were thinned over 38 acres at a cost of Rs. 10. Climber-cutting was done by subordinates free of cost in portions of reserves during their patrol.

Lower Godavari, Gokavaram range.—Climbers were cut in felled coupes at a cost of Rs. 48.

Polavaram range.—Cleaning and climber-cutting was done in the worked timber coupes of Kopalli and Bedadavole reserved forest at a cost of Rs. 31.

Softwooded species in the teak lanka of Bedadavole reserved forest were girdled at a cost of Rs. 15.

Advance thinnings and regeneration fellings were done in Coupe IX of Kopalli reserved forest at a cost of Rs. 10.

Bamboo growth interfering with valuable species in Coupe VI of Kopalli and Kovvada Teak Felling Series was cut at a cost of Rs. 5.

Rajahmundry range.—Climber-cutting was done at a cost of Rs. 40 in the felled coupes of Devancheruvu reserved forest.

Climbers were also cut by the beat staff free of charge in the course of their patrols.

Guntur.—Climber-cutting in the marked coupes was the only operation undertaken. This was done by the subordinates free of cost.

Nellore.—Euphorbea and climbers in coupes under working were cut by contractors. In other areas climber-cutting was attended to by the subordinates.

General.

22. *Vizagapatam.*—Sandal seeds were dibbled in May 1930 in Dharakonda, Sanivaram and Srugudu reserved forests (Narasapatam range), but the operation was not successful as the very few seeds that germinated died owing to the failure of rains and severe heat.

Five pounds of sandal seeds were sown in different places of the felled fuel coupes in Palkonda range with a view to serve as propagation centres. But the operation was a failure due to bad quality of seed and unsuitable locality selected for sowing. The District Forest Officer is being instructed to bestow his personal attention and see that only good seeds and suitable localities are selected during 1931–32.

Sandal trees in the reserved forests are thriving well and many have become seed-bearers. Around the felled coupes in Karaka, Arlova and Madalammakonda reserved forests in the Narasapatam range, 5,240 palmyra seeds were sown. The sowing was a failure due to want of rains and to severe summer.

The divi-divi plants reported to have been surviving in previous years were thriving well during the year also.

Lantana was eradicated in Arlova and Karaka reserved forests over 5 acres at a cost of Rs. 20.

Upper Godavari.—Natural regeneration in most of the reserved forests was satisfactory. Area artificially regenerated with teak was systematically increased. General growth of teak was satisfactory.

Lower Godavari.—Growth of teak was fairly satisfactory in the regenerated areas of Peddapur and Gokavaram ranges. Natural regeneration of other important species was good.

Guntur.—In Kondapalli reserved forest sandal seeds were sown in June 1930 in twenty fenced plots of one-fourth acre each under bushes near water-sources. The seeds germinated at the end of August 1930. Survivals at the end of the year were 701 plants in all the twenty plots.

As usual, babul (*Acacia arabica*) seeds were sown in a 5-acre plot in Nayudupalem reserved forest. The plot was first sold to a contractor for clear-felling the babul growth and he then fenced it. Four hundred goats and 300 sheep were penned and fed with babul pods. The seeds from their droppings were spread over the area which was subsequently ploughed twice. Twelve pounds of babul, cotton and babul seeds from droppings were sown in June 1930 and the seeds germinated in August 1930. Though the germination was at first successful, a portion of the area was submerged

under water for nearly a fortnight in November 1930 owing to heavy rains and so many of the seedlings died. The elevated portion of the plot (about 3 acres) which escaped from being flooded is fully stocked with babul seedlings which are on an average 2 feet high. In the submerged places the stocking is thinly distributed.

Nellore.—Sandal seeds were sown in five plots in Udayagiri range in June, July and October 1930. At the end of the year 494 seedlings were observed but they are said to have been in a precarious condition.

CHAPTER IV.—EXPLOITATION.

(*a*) System of Management.

(i) *Major Produce.*

23. The following statement shows the areas exploited during the year under the various sylvicultural systems in each division :—

Divisions.	Clear felling.	Simple coppice.	Selection fellings.	Improvement fellings.	Bamboos.
	ACS	ACS	ACS.		ACS.
Ganjam	315	1,280	8,912	..	19,045
Vizagapatam	18	470	172	..	23,824
Upper Godavari	257	..	..	..	101,801
Lower Godavari	90	2,033	..	..	45,482
Guntur	..	1,170	..	..	2,566
Nellore	..	2,125	..	..	..
Total, First Circle ..	680	7,078	9,084	..	192,718

Clear-felling—Ganjam.—In Ghumsur forests clear-fellings were carried out in both the series of the Plains Sal Timber Working Circle and Ravine Working Circle as detailed below :—

Series I, Periodic Block I.—Coupe XII of this series was located in Kutnikuppa and Miniari blocks consisting of 152 acres and was put up to auction. Though fair prices were offered, it was believed that a larger profit could be made by departmental working and it was decided to extract the useful timber departmentally offering the residual growth for sale. The result of the operation was as follows :—

Cost of operation—Rs. 1,939—8—0.

	C.FT.
Outturn timber	18,705
,, poles	16,580
Total ...	35,285

Of this, 18,600 cubic feet was sold for Rs. 3,790–12–0. The residual growth in the coupe was sold for Rs. 1,098. There is a balance of 16,685 cubic feet in stock for disposal in 1931–32.

Series II, Plains Sal Timber Working Circle.—In Coupe XII of 49 acres in Buguda range useful timber was extracted departmentally at a cost of Rs. 1,479. Outturn 15,326 cubic feet was sold for Rs. 3,689. The residual growth was sold for Rs. 1,176.

Ravine Working Circle, Series I, Coupe IX of 96 acres in Rambha reserve was sold for Rs. 1,248 at Rs. 13 per acre. In Series II, Coupe I of 18 acres in Buguda was sold for Rs. 315 at Rs. 17–8–0 per acre.

Vizagapatam.—An area of 18 acres of Sal Coupe IV in Palakonda range was clear-felled, and 3,598 cubic feet were taken to the sale depot at Viraghattam and sold for Rs. 2,375—about 1,000 cubic feet of small poles were sold in the coupe for Rs. 50 bringing the total revenue to Rs. 2,425.

Upper Godavari.—The following coupes were clear-felled departmentally and the financial results of working are given below :—

Range.	Reserve and coupe number.	Yield in cubic feet.		Area in acres.	Gross expenditure.	Gross revenue.	Cost per acre.	Net revenue per acre.
					Rs.	Rs.	Rs.	Rs.
Pulusumamidi.	Walsugri C. No. IV.	Teak ..	8,447	29	1,463	..	50	..
		Non-teak ..	4,269					
		Total ..	12,716					
Marrigudem ..	Seetharampuram C. No. VII.	Teak ..	4,343	35	1,561	1,689	45	..
		Non-teak ..	4,434					
		Total ..	8,777					
Do. ..	Ramachendram C. No. X.	Teak ..	3,517	54½	1,363	..	45	..
		Non-teak ..	5,827					
		Total ..	9,344					
Bhadrachelam.	Dummugudem C. No. VI.	Teak ..	8,957	61	2,609	1,373	43	..
		Non-teak ..	5,636					
		Total ..	14,593					
Do.	Tunikicheruvu C. No. X.	Teak ..	3,815	45	1,555	1,968	35	..
		Non-teak ..	4,233					
		Total ..	8,048					
Cherla ..	Peddamidisileru.	Teak ..	2,647	25	660	..	26	..
		Non-teak ..	1,039					
		Total ..	3,686					

Owing to serious slump in the timber market the sales held in October and December 1930 were a failure. All the teak timber and a portion of the teak of Coupe X of Tunikicheruvu, all teak of Coupe VI of Sitaramapuram and a portion of teak and non-teak of Coupe VI of Duggugudem was sold on tender and by piecemeal auction sales in small lots. The amounts noted above against these coupes represent the realizations by this method.

The following timber coupes were partly worked during the year. Their results will be reported in 1931–32 :—

(1) Coupe VII of Dummugudem reserved forest.

(2) Coupe VII of Sitarampuram reserved forest.

(3) Coupe V of Walsugri reserved forest.

(4) Non-teak Coupe IV of Lakkavaram reserved forest.

(5) Non-teak Coupe VI of Rekapalli reserved forest.

Coupe No. XI of Ramachendram and Tunikicheruvu reserved forest and Coupe IV of Pedamidisileru reserved forest were not worked owing to general trade depression.

Lower Godavari.—Timber Coupes IX of Bedadavole (54 acres) and VII of Koppalli (36 acres) were worked through the agency of contractors.

Selection fellings—Ganjam.—In accordance with the prescriptions of the revised working plan selection fellings were carried out in the following reserves :—

Mojjogoda range.—Coupe I of 749 acres in Darpangia reserved forest—yield 8,403 cubic feet—revenue Rs. 4,664. Expenditure incurred on extraction was Rs. 550.

Russellkonda range.—Coupe I of 2,165 acres in Baiballi reserved forest—yield 4,854 cubic feet—revenue Rs. 1,290. Expenditure Rs. 275.

Kukuluba range.—Coupe I of 3,841 acres in Chendragiri reserved forest—yield 18,700 cubic feet—revenue Rs. 4,461. Expenditure Rs. 1,253.

Bontha range.—Coupe I of 1,217 acres in Paichalia reserved forest—yield 20,094 cubic feet—expenditure Rs. 1,399 : only 1,957 cubic feet were sold during the year for Rs. 275.

Surada range.—Coupe I of 940 acres in Pippalaponka reserved forest—yield 2,094 cubic feet—revenue Rs. 210. Expenditure Rs. 150.

Vizagapatam.—Dead and dying sal trees of 4½ feet in girth and above were removed from Sal Block IV of Palakonda range, yield 6,861 cubic feet of timber and 200 cubic feet of branchwood which were sold for Rs. 9,937.

Simple coppice.—The fuel coupes in all the divisions were worked under the Simple Coppice system except in the mangrove forests of Repalle range, Guntur district, where five seed-bearers were left per acre.

Unregulated fellings.—These were as usual confined to the unreserved lands in all divisions but mainly in Upper Godavari and Rampa in Lower Godavari.

In Upper Godavari 57,323 cubic feet of timber and 47,860 cubic feet of fuel were removed from the unreserves. Rupees 4,374 and Rs. 810 respectively were realized during the year.

(ii) *Minor Produce.*

24. *Bamboos and minor produce.*—The right to collect bamboos was as usual leased out to contractors in all the divisions. But in Upper Godavari permits were also issued to local people for removal of bamboos from coupes not leased out during the year. Bamboos were sold on a large scale from the unreserves of lower Godavari and Rampa.

Minor produce was generally leased out to contractors except in the Sriharikota range of Nellore district where it was collected departmentally to afford congenial employment to the Yanadis. In Vizagapatam district the hillmen of the Agencies were allowed to collect minor forest produce free. Most of this produce is brought by them for sale at recognized shandies where seigniorage is collected from purchasers at fixed rates. The right to collect seigniorage was leased out in auction for a sum of Rs 6,528. In Rampa the sale system prevails but seigniorage is collected by the department at recognized shandies, the amount realized being about Rs. 30,300.

Nux vomica.—Only in Lower Godavari was the produce leased out separately for Rs. 225. Elsewhere it was sold along with other kinds of minor forest produce.

Cassia auriculata (tangedu) bark.—In Vizagapatam this could not be sold for want of demand and it is never leased out in Ganjam as it does not occur in sufficient quantities. In Lower Godavari the previous year's lease was in force during the year under report. In Guntur an amount of Rs. 689 was realized and in Nellore Rs. 6,984. The tangedu bark contractors have constantly complained during the year about the fall in prices of barks and sought for extensions for payment of kists. Almost all dues have been collected.

Cassia fistula bark.—The right to collect this bark was leased out in Ganjam for Rs. 1,560. Elsewhere there was no demand for this.

Diospyros melanoxylon (*tumki*) *leaves.*—The right to collect these leaves was sold in Upper Godavari for Rs. 3,300; but the contractor did not work at it during the year on account of financial depression.

Fodder grass and hay.—In Ganjam the right to cut and collect grass in Napier's Park reserved forest was leased for Rs. 12. The Revenue Department realized Rs. 42 by the sale of grass in unreserves. In Lower Godavari the right to cut and remove grass from Coringa and Kandikuppa reserved forests was leased out for Rs. 405.

Grazing was as usual regulated by issue of a single permit for the whole range except in Nellore where grazing under the Kancha system prevails. Free removal of grass in headloads is permitted in every district. In Nellore, free removal from closed areas attached to kanchas is allowed under the control of the kanchadars who are responsible for the good protection of the areas.

Manure leaves.—In Nellore, the right to collect manure leaves in Sathiavedu range was sold for Rs. 390.

(*b*) Agency of Exploitation.

(i) *Departmental Agency.*

25. The outturn of major produce by departmental agency is compared with that of the previous year in the following statement:—

Year.	Timber in thousands of cubic feet.	Fuel in thousands of cubic feet.	Bamboos value.	Minor forest produce value.
			Rs.	Rs.
1929-30	120	49	387	14,307
1930-31	196	80	271	7,100

The increase under timber occurs mainly in Ganjam and is due to the resumption of departmental extraction of timber from the Plains Sal Timber Working Circle and Selection Working Circle coupes and in Vizagapatam to extraction of large quantity of sal timber in Palakonda range.

The increase under fuel occurs in Ganjam due to arrears in thinnings being brought up to date and in Lower Godavari to undertaking arrear thinnings in Kandikuppa casuarina plantation.

The decrease under minor forest produce occurs mainly in Nellore and is due to considerable fall in prices owing to trade depression. A large quantity of nux vomica could not be sold before the close of the year under report owing to failure of sales. It was sold after the close of the year.

(ii) *By purchasers.*

26. The following statement shows the quantity of major produce and the value of minor produce removed by purchasers during the year and in the previous year:—

Year.	Timber in thousands of cubic feet.	Fuel in thousands of cubic feet.	Bamboos.	Grass and grazing.	Other minor forest produce.
			Rs.	Rs.	Rs.
1929-30 ..	863	3,081	1,65,189	1,13,679	1,17,083
1930-31 ..	506	2,680	1,39,624	1,06,827	1,11,096

Timber.—The decrease is due to working the Plains Sal Timber Working Circle and Selection Working Circle coupes departmentally in Ganjam; less assignments of land in Palakonda range of Vizagapatam district by Revenue authorities and in Lower Godavari to the area of coupes being less than in the previous year.

Fuel.—The decrease occurs in Lower Godavari due to existence of blanks in coupes and suspension of the contractor's work in the Kandikuppa mangrove coupe for non-payment of kists and in Nellore due to transfer of Kanigiri range to Second Circle and inclusion of the value of growth in Kollurpad plantation in 1929–30.

Bamboos.—The decrease is due to the depression in the market.

Grazing.—The decrease is attributed to cattle mortality and late setting in of monsoon in Ganjam, Vizagapatam and Guntur districts.

Minor forest produce.—The decrease is due to failure of tamarind crop and to general trade depression.

The accuracy of contractors' accounts was verified by check of removals in transit and punishing cases of removal without permits issued by contractors.

(iii) & (iv) *By right-holders, and under privileges and free grantees.*

27. The following table shows the quantity and value of the produce removed under this head:—

——	Timber in thousands of cubic feet.	Value.	Fuel in thousands of cubic feet.	Value.	Bamboos.	Grazing.	Other produce.	Total.
		Rs.		Rs.	Rs.	Rs.	Rs.	Rs.
Right-holders ..	18	1,643	55	3,025	..	187	335	5,190
Free grantees ..	115	11,735	112	17,166	1,310	14,818	2,027	47,056

The Khonds of Chokkapad khandam have a right for free removal of timber, etc., for their domestic and agricultural purposes and free grazing of cattle. The Khonds elsewhere than in Chokkapad were granted concessions for rendering the necessary help in putting out fires.

In Vizagapatam, free grazing to the extent of Rs. 1,109 was allowed in the Dharakonda, Sanivaram and Karaka reserved forests to the hillmen and inhabitants of the neighbouring villages for services rendered by them in fire protection.

In Lower Godavari, the Koyas and Reddis of the Agency continued to enjoy the free removal of unclassified timber for domestic and agricultural purposes.

Free grants of timber and minor forest produce were made in all the districts mainly for rebuilding houses destroyed by fire. The fuel supplied to the Port Conservancy Board, Cocanada, from the Coringa Extension reserved forest valued at Rs. 17,056, is also shown under free grants as usual.

(c) Outturn and Sources of Forest Produce.

28. The total outturn from all agencies is compared in the following statement :—

Year.	Timber in thousands of cubic feet.	Fuel in thousands of cubic feet.	Bamboos.	Gross value of minor forest produce including grass and grazing.
			Rs.	Rs.
1929-30	1,096	3,258	1,66,489	2,61,665
1930-31	835	2,927	1,41,205	2,42,390

CHAPTER V.—FINANCIAL RESULTS.

29. The following figures show the financial position of the Circle as compared with that of the previous year :—

	1929-30.	1930-31.
Receipts.		
	Rs.	Rs.
Revenue	10,96,594	7,46,131
Deduct Refunds	8,978	5,409
Net revenue	10,87,616	7,40,722
	(a) — 1,21,000	

	1929-30.	1930-31.
	RS.	RS.
Expenditure.		
Conservancy and maintenance	1,51,669	1,52,834
Establishments	4,58,339	4,63,473
52.A. Capital outlay on Forests	43,854	33,481
	(*a*) — 1,21,000	
Total expenditure ...	6,53,862	6,49,788
	(*a*) — 1,21,000	
Surplus	4,33,754	90,934

(*a*) Represents adjustments in supplemental March Final accounts of 1929-30 on account of Russellkonda Saw Mill.

The following statement shows the financial position of each division during the year under report and a comparison of surplus or deficit with that of the previous year :—

Division.	1930-31.			Surplus or deficit in 1929-30.
	Revenue.	Expenditure.	Surplus or deficit.	
	RS.	RS.	RS.	RS.
Direction	450	47,346	— 46,896	— 39,265
Ganjam	98,517	1,63,630	— 65,113	+ 1,14,810
Vizagapatam	53,595	51,246	+ 2,349	+ 6,099
Upper Godavari	40,633	1,12,521	— 71,888	+ 34,428
Lower Godavari	2,57,836	1,24,949	+ 1,32,887	+ 1,81,908
Guntur	1,57,093	75,614	+ 81,479	+ 81,501
Nellore	1,32,598	74,482	+ 58,116	+ 54,273
Total ..	7,40,722	6,49,788	+ 90,934	+ 4,33,754

The above statement shows that Ganjam and Upper Godavari divisions worked at a loss and all the other divisions at a profit.

In Ganjam the deficit is due to there being no adjustments on account of recoveries from Government Commercial Undertakings (Rusellkonda Saw Mill) during the year, and to poor prices obtained for timber extracted departmentally and for fuel coupes.

In Upper Godavari the deficit is entirely due to there being no demand for the timber extracted departmentally and to poor prices realized for bamboo coupes owing to trade depression.

The important variations between the actuals of 1930-31 and those of the previous year are explained below :—

RECEIPTS.

Timber and other produce removed by Government agency— (*Timber Rs.* 81,724).—The decrease occurs mainly in Godavari

Upper division and is due to the timber extracted departmentally not having been sold, there being no demand for it.

Other produce (*Rs.* — 7,011).—The decrease occurs mainly in Nellore and is due to lower rates realized for minor forest produce collected departmentally in Sriharikota range and to non-sale of nux vomica during the year. It was sold after the close of the year.

Timber and other produce removed by consumers and purchasers.—Timber (*Rs.* — 39,108).—The decrease occurs chiefly in Ganjam (Rs. — 13,646). Upper Godavari (Rs. — 16,598) and Lower Godavari (Rs. — 8,678). In Ganjam the decrease is due to working the timber coupes departmentally; in Upper Godavari the decrease is due to sale of unreserve Coupe XIII of Cherla range due in 1930–31 a year earlier and to less number of darkhasts for lands containing timber; and in Lower Godavari to less removals of timber from Rampa and fall in the sale price of Koppali timber coupe in Polavaram range.

Bamboos (*Rs.* — 25,616).—The decrease occurs chiefly in Upper Godavari (Rs. — 11,364), Lower Godavari (Rs. — 9,694) and Guntur (Rs. — 2,532) and is due to the general trade depression and consequent slump in the Rajahmundry market.

Grazing (*Rs.* — 6,648).—The decrease occurs in Ganjam, Vizagapatam, Guntur and Nellore divisions and is due to late setting in of the monsoon and cattle mortality in the first three divisions and to non-sale of a greater number of kanchas in Nellore district than in the previous year.

Other minor forest produce (*Rs.*—9,180).—The decrease occurs mainly in Lower Godavari and Guntur and is due to the failure of minor forest produce crop, specially tamarind.

By Revenue Department.—Timber (*Rs.*—15,586), *firewood* (*Rs.*—5,704) *and other minor forest produce* (*Rs.*—17,310).—The decrease occurs generally in Ganjam, Vizagapatam, Lower Godavari and Guntur. These are fluctuating items and is generally attributed to less extent of area assigned on dharkhast.

EXPENDITURE.

8. *b. Conservancy and Works—Timber, etc., removed by Government agency—Timber* (*Rs.* + 3,379).—The increase is due to departmental working of timber coupes in Ganjam instead of selling them standing and to extraction of a larger quantity of timber in the Palakonda range in Vizagapatam district than in the previous year.

I. Minor forest produce (*Rs.* + 2,745).—The increase is due to collection of a larger quantity of minor forest produce departmentally in the Sriharikota range in Nellore district.

II. Forest produce removed by private agency (*Rs.* +4,301).—The increase occurs in Ganjam, Godavari Upper, Guntur and Nellore and is due to the entertainment of the full sanctioned strength of reserve watchers during the year.

III. Maintenance, repairs and renewals—(a) Feed and keep of cattle (*Rs.* +1,473).—The increase appears to be due to a wrong adjustment in the March final accounts of the Accountant-General. He has been addressed.

(b) Renewals, replacements of stores, etc. (*Rs.*—17,644).—The decrease occurs in Nellore and is due to there having been no renewal of tram materials during the year as in the previous year.

Communications and buildings—Roads and bridges (*Rupees* + 1,331).—The increase occurs in Ganjam and is due to more roads having been repaired.

Buildings (*Rs.* + 4,421).—The increase occurs mainly in Ganjam and is due to extensive repairs done to Extra Assistant Conservator's quarters at Russellkonda and Balliguda.

Conservancy and regeneration—Maintenance of boundaries (*Rs.* + 830).—The increase occurs in Upper and Lower Godavari divisions and is due to the triennial clearance of the boundary lines between Government and dupati (zamindari) lands in the former and maintenance of a greater length of lines in Rampa in the latter division.

V. Miscellaneous—Rent of leased forests (*Rs.* + 1,908).—The increase occurs in Lower Godavari and represents adjustments made by the Accountant-General towards payments of forest compensation to muttadars in Rampa made by Revenue Department.

52. *A. Capital Outlay on Forests—Forest surveys* (*Rupees* — 8,475).—The decrease is due to no fresh special forest surveys having been undertaken in the Circle.

Demarcation (*Rs.* + 2,022).—The increase occurs in Ganjam and Godavari Lower and is due to greater progress in the demarcation of blocks selected for reservation in Balliguda and Rampa.

Sowing and planting (*Rs.* + 4,545).—The increase is due to debit to this head of expenditure in Godavari Lower and Guntur on casuarina planting. In the previous year this expenditure in Lower Godavari was debited to '8. b. Conservancy and Maintenance', and no expenditure was incurred in Guntur.

Communications and buildings—Roads and bridges—Works in progress (*Rs.* + 3,313)—*New works* (*Rs.* — 2,827)—*Buildings—Works in progress* (*Rs.* + 1,644)—*New works* (*Rs.* — 5,313).—The expenditure depends upon the number of works undertaken. The important works carried out during the year are given

in Chapter II. Besides, on account of financial stringency no new works not commenced by October 1930 were undertaken.

Livestocks, stores, tools and plant—Purchase of livestock (*Rs.* — 4,086).—No new purchase of livestock was made during the year under report.

Purchase of stores, tools and plant (*Rs.* — 1,091).—The expenditure on this account has been restricted to the minimum requirements owing to financial stringency.

8. c. *District Establishments—Pay of officers—Voted* (*Rupees* + 10,683).—The increase is due to the posting of a Provincial officer to Guntur district.

Pay of establishment—Permanent (*Rs.* — 9,552).—The decrease is due to the transfer of Kanigiri range to Kurnool South division in the II Circle.

Travelling Allowance—Non-voted (*Rs.* — 2,052).—The decrease is due to there having been a fewer number of Imperial Service officers in 1930–31 than in 1929–30 in the Circle.

Travelling Allowance—Voted (*Rs.* — 1,578).—The decrease is due to observance of economy.

Non-contract Contingencies—Rates and Taxes—Non-voted (*Rs.* + 2,171)—*Rents—Voted* (*Rs.* + 1,019).—The increase is due to payment of arrear amounts during the year.

The outstanding revenue at the close of the year amounted to Rs. 85,115–12–6 of which only Rs. 20,595 fell due within the year against Rs. 14,751 in the previous year. Out of the amount of Rs. 85,115–12–6 outstanding at the close of the year, Rs. 55,216–13–0 represents balance of lease amounts of fuel coupes to be worked in 1931–32 in Sriharikota range, Nellore, the first instalments for which have been collected in March 1931.

Of the revenue realized in the year 43 per cent was from major produce, 49 per cent from minor produce and 8 per cent from other sources.

Of the expenditure 12 per cent relates to exploitation, 62 per cent to improvements and upkeep of forests and 26 per cent to miscellaneous items.

CHAPTER VI—RESEARCH AND EXPERIMENTS.

(*a*) Research.

30. Nil.

(*b*) Experiments.

31. *Ganjam.*—As regards the sal regeneration experiments in the ravine areas of Rambha reserve referred to in the last year's report it remains now to ascertain whether and to what extent and

in what period the seedlings established on the various plots will advance to the switch stage. Details of the experiments and instructions for its future management are embodied in the revised working plan for the Ghumsur forests where an enumeration in July 1931 is prescribed.

The measures to be taken to provoke natural regeneration of sal in the Ravine Working Circle (over parts of which the natural regeneration is notoriously deficient) were under the consideration of the working plans staff during the year and in the revised working plan definite prescriptions for experimental measures are laid down. These will be initiated in 1931–32.

Vizagapatam.—The tangedu (*Cassia auriculata*) sowings were continued at the instance of the Deputy Forest Utilization Officer in a plot of six acres in the felled coupe in Arlova reserve forest, the area having been cleared of growth and the debris burnt. Ploughing was done twice and the seeds were sown in furrows three to four feet apart. The operation was successful and the cost amounted to Rs. 50.

Upper Godavari.—The six satinwood (*Chloroxylon swietenia*) sample plots opened in 1922 and 1924 in Tunikicheruvu, Bandirevu and Ramachendram reserved forests to find out the rate of girth increment of individual satinwood trees in a mixed and in a pure crop were maintained during the year. The measurements taken in the past with metallic tape having proved unreliable, measurements will be taken in 1931–32 with a steel tape and the experiment has to be treated as a new one. Regeneration experiment with *Hardwickia binata* was started. No definite conclusion can be arrived at so soon.

Lower Godavari.—The attempt made in Upputeru Block II to discover by experiments the suitable species that could be grown in the blanks proved a failure.

The experiments of growing teak artificially in Ammayagoppu valley of Rajavommangi reserved forest of Peddapur range, and Sudikonda, Tirumalayapalem and Mallavaram reserves of Gokavaram range having proved successful, it is proposed to survey the plantable area in the Gokavaram range and to undertake planting under a regular scheme.

Guntur.—The experiments started in mada (*Avicennia officinalis*) forest in Muthayapalem reserved forest are being continued with the exception of the one in which the object was to find out if the tea-bushy appearance of mada crop in felled coupes is due to grazing and lopping of leaves for cattle fodder or to differences in tidal action. It was proved that even closed and fenced areas

did not escape the cutting of leaves for cattle fodder, and that the tea-bushy appearance of the young growth was due only to lopping and browsing and not to tidal action.

The other experiment to ascertain whether closure to grazing and lopping has any appreciable effect on the composition, stocking and development of young mada growth irrespective of tidal flooding is being continued.

Nellore.—The experimental plots opened in 1928–29 with a view to obtain reliable data of the height and girth increment of certain species, to check the coppice growth of these species, and to compare the rate of growth by retaining all the coppice shoots in some and by reducing the coppice shoots to one or two in others were maintained and the measurements were recorded in the registers.

Experiments in sowing *Cassia auriculata* seeds were continued in Sathiavedu range.

Experimental plots were opened in felled coupes in Sathiavedu and Sriharikota ranges to find out which species were best suited to improve stocking.

In Sathiavedu range four or five plots were opened in each coupe, the soil was dug up to a depth of one foot and seeds were sown in the first few days of July. The results are indicated below :—

Species sown.	Quantity of seeds in lb.	Number of seedlings on 31st March 1931.
Dirisinam (*Albizzia lebbek*)	133⅛	12,196
Seema tangedu (*Cassia siamea*)	26½	8,524
Yegi (*Pterocarpus marsupium*)	42¼	565
Sirumamidi (*Anogeissus latifolia*)	13	219
Tamarind (*Tamarindus indicus*)	10	660
Vepa (*Azadirachta indica*)	15	129

Cassia siamea and *Albizzia labbek* have given the best results

The following are the results of the plots opened in 1929–30 :—

Species sown.	Quantity of seeds in lb.	Number of seedlings on 31st March 1931.
Dirisinam (*Albizzia lebbek*)	58⅝	4,430
Karaka (*Terminalia chebula*)	36	27
Sirumamidi (*Anogeissus latifolia*)	40$\frac{9}{20}$	4,979
Tamarind (*Tamarindus indicus*)	28$\frac{7}{10}$	578
Red sanders (*Pterocarpus santalinus*) ...	5	5

In Sriharikota an experiment was tried to see how best blanks could be restocked. An area of 1·5 acres was laid out and divided into fourteen plots (13, 1 chain by 1 chain and the 14th, 1½

chains by 1½ chains). In the thirteen 1-square chain plots, seeds of the following species were sown :—

Nim (*Azadirachta indica*), *bandari* (*Dodonœa viscosa*), *chakereni* (*Albizzia amara*), *alli* (*Memecylon edule*), kunkudu (*Sapindus emarginatus*), mushti (*Strychnos nux vomica*) and neredu (*Eugenia jambolana*)—The last two species did not germinate at all. Nim (*Melia indica*) was sown in two plots, in one of which there were 2,784 seedlings while in the other not one seedling was found, though the seeds were the same in quality.

Kunkudu (*Sapindus emarginatus*) with 221 seedlings gave better results than it has given before. As regards the other species, the seeds germinated but as the hot weather came on all seedlings turned yellow and gradually died off. It is probable that they will come up again in the rains.

In the 1½-square chain plot, seeds were sown in rows four feet apart. The rows were (1) bandari (*Dodonœa viscosa*), (2) alli (*Memecylon edule*), (3) nim (*Melia indica*) and (4) mushti (*Strychnos nux vomica*) and so on repeated in this order. The object was to see if the bandari which grows more quickly would serve as nurse to the other species. Mushti (*Strychnos nux vomica*) did not germinate at all; the other species germinated fairly well but died during the hot weather. There were only a few bandari (*Dodonœa viscosa*) seedlings on the lines.

The experiment will be repeated but the bandari will be sown earlier than the other species to allow it to be grown by the time the other seeds germinate.

CHAPTER VII—ADMINISTRATION.

32. Mr. J. H. Longrigg held charge of the Circle from 1st April 1930 to 16th April 1930 and thereafter Mr. F. R. Madan till the end of the year.

33. Kanigiri range of the Nellore division was transferred to the South Kurnool division of the II Circle with effect from 1st April 1930.

Mr. V. N. Seshagiri Rao, Extra Assistant Conservator of Forests and Special Forest Officer, Rampa, completed the selection and demarcation of blocks in Rampa. As Forest Settlement Officer, he completed the settlement of the following nine blocks notified under section 4 :—Vedullakonda, Addatigala, Dutcherti, Velamalakota, Musurumilli, Seethakhandi, Italapad, Kannaram and Lakshmipuram. Section 4 notifications in respect of eight other blocks were received after the close of the year.

34. *Tours.*—The Conservator toured in all the divisions of the Circle and submitted inspection notes to the Chief Conservator on Vizagapatam and Guntur districts. The total number of days spent in camp during the year fell short of the prescribed minimum by thirteen days due to Mr. Madan sustaining an accident to his foot, in February 1931, which prevented him from touring in the latter part of the year.

The touring of the District Forest Officer, Lower Godavari, alone was less than the minimum prescribed by ten days due to his having had an attack of fever after a tour in the Papikonda Hills. The other District Forest Officers spent more than the prescribed minimum in camp.

35. *Inspection of District Forest and Range offices.*—All the District Forest Offices in the Circle were inspected by the Conservator.

The District Forest Officers inspected all the range offices.

36. *Audit of accounts.*—The accounts of District Forest Offices for 1929–30 were inspected by the Accountant-General's staff and the result was generally satisfactory.

37. *Vernacular Training School.*—No Vernacular Training School was held during the year. The subsidiary session of the Vernacular Training School held in Upper Godavari during the previous two years was not held during the year under report for want of a sufficient number of subordinates to be trained.

38. *Health of establishment and sanitation.*—The health of the establishment was as usual bad in the Agency tracts, the Kukuluba and Bontha ranges in Ganjam and the Sriharikota range in Nellore.

One forester, 2 guards and 2 watchers in Vizagapatam and 2 guards in Upper Godavari died of malaria, one forester in Lower Godavari died of blackwater fever.

A watcher was murdered in Vizagapatam while on duty in connexion with a goat browsing case.

No special measures of sanitation were undertaken except clearing undergrowth round buildings.

CHAPTER VIII—GENERAL.

39. *Formation and management of panchayats (to include the forest village system).*—All the ryots' forests in the Circle are under the control of the Revenue Department except Tirumalpad reserved forest (140 acres) in the Nellore division which was transferred back to the Forest Department during the year.

The Forest Village system is not in force anywhere in this Circle.

40. *Measures for improving local supplies and facilities (including water-supply, manure leaf, etc.)*.—The wants of the people in respect of small timber, fuel and bamboos were met in all the divisions except Upper Godavari (where no measures were needed owing to the existence of vast areas of unreserved and zamindari lands) by coupe contractors. There is no great demand for manure leaf in this Circle except in Sathiavedu range of Nellore where it is leased out.

Guntur.—As in the previous year, the removal of yepi (*Hardwickia binata*) leaves for fodder was allowed at 6 pies a head-load till 14th October 1930 owing to the failure of rains. Provision is being made under Chief Conservator's orders in the draft working plan permitting such removals.

As regards improvement in water-supply in grazing grounds, measures were required only in Guntur and Nellore. In Guntur five tanks in reserved forests were repaired at a cost of Rs. 394 and permission was given to the public in seven cases to repair tanks. In Nellore tanks and ponds in reserved forests were repaired at a cost of Rs. 310.

41. *Timber Transit Rules.*—The rules are reported to have worked satisfactorily. The Timber Transit Rules for Nellore have not yet been sanctioned.

42. *Jungle tribes—Ganjam.*—The Khonds continued to be on good terms with the department.

Vizagapatam.—The hill tribes availed themselves of the privileges granted to them and they were employed on all departmental works.

Upper Godavari.—The Koyas and Reddis continued to be useful and were employed on all kinds of departmental operations. Rewards to the extent of Rs. 806 were also disbursed to them in respect of areas successfully protected. They also enjoyed the privileges of free removal of produce for domestic and agricultural purposes. The Koyas and Reddis of the Bhadrachalam taluk were as usual allowed free grazing in reserves and podu in unreserves.

Lower Godavari.—The settlers in the Agency tracts rendered help to the department in return for which they were allowed the concession of grazing their cattle at 1 anna per cow or buffalo. Rewards for successful fire-protection were disbursed to them in Peddapur range.

Guntur.—The Chief Conservator's orders on the proposals for settling Chenchus in the Palnad range outside reserves were received after the close of the year and will be given effect to during the current year.

Nellore.—Sixty-eight families of Yanadis were employed on the collection of minor forest produce in the Sriharikota range. The wages earned by them amounted to Rs. 6,523 and an additional sum of Rs. 2,936 was granted to them in the shape of rice, cloth, cash and deposits in the Postal Savings Bank account. On 31st March 1931 there were 71 Savings Bank accounts totalling a deposit of Rs. 1,236 thus showing that the Yanadis are cultivating the tendency of thrift. The deposits which were previously in the name of the District Forest Officer have been transferred to the individual Yanadis.

43. *Mining and quarrying.*—The mining for mica is being carried on in some of the ryots' forests under the control of the Revenue Department in the Nellore division.

44. *Livestock—Elephants.*—The total number of elephants in the Circle was 3, as in the last year—2 in Upper Godavari and 1 in Lower Godavari. Two of these belong to the Revenue Department. Two elephants required to complete the quota of the Forest Department in the East Godavari Agency are being transferred from Nilambur division.

Other animals.—The only buffalo in the Circle which is being maintained for carrying water from a stream to the Kambakkam Hill bungalow is reported to have become very old and unfit for further work. It is to be replaced.

45. *Veterinary establishment.*—The Inspector of Livestock, Calicut, inspected the elephants in Upper Godavari in May and November 1930 and that in Lower Godavari in November 1930.

46. *Wild animals.*—There has been no trouble from tigers in Kukuluba and Bontha ranges where 'tiger scare' is usually prevalent.

47. *Civil suits.*—The two appeals filed by the contractor B. Chenchurama Nayudu referred to in the last year's report are still pending in the High Court.

48. *Control of unreserved lands by the Forest Department—Upper Godavari.*—The unreserved lands in this division are under the control of the Forest Department. The unreserve coupe in the Nugur range was not worked during the year as no purchasers came forward owing to general trade depression.

Lower Godavari.—The semi-agency tracts in Yellavaram, Chodavaram and Polavaram divisions continued to be under the control of the Forest Department. The special unreserves constituted with a view to prevent podu continued to remain under the control of the Forest Department.

49. The relations between the Revenue and Forest Departments were cordial.

50. *Russellkonda Saw Mill.*—Except the machinery and a few stores all the assets of the saw mill have been disposed of. The main mill building and drying and heating sheds which were paid for by the Public Works Department at the close of the last year were not handed over to that department and the question of refunding the amount to the Public Works Department is under correspondence.

An offer for the buildings and machinery is under the consideration of Government.

ENCLOSURE

REPORT ON EACH FOREST DISTRICT FOR 1930-31.

GANJAM.

Description.—The main seat of forest activity is in the Ghumsur and Surada taluks of the Ghumsur Revenue division where extensive sal forests have long been under close management. This tract is situated in the north-eastern portion of the district occupying the easternmost portion of the Eastern Ghauts. The three reserves in the Mohiri Hills near the coast contain fuel and bamboos and are important as water catchment areas. The Eastern Ghauts known as the Maliahs occupy the western part of the district. Here lie the forests of Balliguda Agency forming part of the District Forest Officer's charge since July 1927. They are capable of producing fine sal but have been much degraded by the Khonds through shifting cultivation known as podu. The importance of these forests for purposes of water conservancy is great. The main activities of Forest Department there at present are directed towards the reservation of the more important climatic forests and of those capable of producing big timber in localities where there is a reasonable chance of future development.

Area.—Reserved forest 625 square miles and 108·49 square miles of reserved lands in Balliguda Agency notified by the Agent to the Governor in Ganjam under rule 2 of the rules framed under section 26 of the Madras Forest Act.

How the Forest division is split up into subordinate and executive charges.—The whole division excluding Balliguda is divided into eight ranges consisting of 70 beats. The Balliguda Agency forms a single charge under an Extra Assistant Conservator of Forests assisted by a ranger. Practically the whole lower subordinate staff has been withdrawn and a system of protection through Patros has been initiated. The results are so far encouraging and indicate that the system ensures a thorough trial.

Cost of the administration—

	Ganjam division.	Balliguda.
	RS.	RS.
Pay of officers including travelling allowance	25,158	9,391
Pay and allowances of rangers ...	19,364	2,010
Pay and allowances of subordinate staff	27,601	1,472
Pay and allowances of office establishment	16,623	1,499
	88,746	14,372
Miscellaneous including contingencies.	5,769	
Grand Total ...		1,08,887

Cost under important heads—

Timber operations	7,854
Roads—New works	3,996
Do. Repairs	3,018
Buildings—New works	1,640
Do. Repairs	14,074
52. A. Capital—Forest surveys	810
52. A. Capital—Demarcation, Balliguda ...	1,021
52. A. Capital—Purchase of stores, tools and plant	174
Fire-protection	6,670
Other works	5,662
Other miscellaneous items including pay of watchers	9,824
Total ...	54,743

Income from main sources—By Forest Department—

Timber	25,685
Firewood	29,282
Firewood—Balliguda	50
Bamboos	6,909
Grazing	9,148
Other minor produce	2,067
Miscellaneous revenue	8,380
	81,521
Deduct—Refunds	1,999
Total ...	79,522

By Revenue Department—

	Rs.
Timber	11,256
Timber—Balliguda	139
Firewood	3,490
Bamboos	135
Other minor produce	3,975
Total ...	18,995

The chief work done in the Forest district is—

(i) In Ghumsur the supply of timber (mainly sal) from 4 felling series; and sal poles from about 20 felling series; fuel and bamboos; and regeneration of the felled areas;

(ii) in the Mohiri Hills the supply of fuel and bamboos;

(iii) in the Maliahs restriction of shifting cultivation (podu) to be followed by settlement, and conservancy and general development of roads and buildings.

Parlakimedi Maliahs.

Parlakimedi Maliahs is a separate charge managed by a Special Forest Officer under the Agent to the Governor, Ganjam. The forest blocks comprise 177 square miles and have been notified under section 26 of the Madras Forest Act.

Cost of administration—

	Rs.
Pay of Special Forest Officer	7,850
Pay of establishment	18,186
Allowances—Voted	5,645
Miscellaneous including contingencies ... .,	5,396
Total ...	37,077

Cost under other important heads—

Timber operations	847
Firewood	467
Fire-protection	592
Permit establishment	1,987
Buildings—Repairs	362
Miscellaneous	425
Total ...	4,680

Income from main sources—By Forest Department—	RS.
Timber	11,386
Firewood	6,693
Bamboos	3,231
Minor forest produce	19,993
Grazing	1,456
Miscellaneous	1,722
Total ...	44,481

VIZAGAPATAM.

Description.—The Eastern Ghauts occupy a great part of the division. These are the Agency tracts. In the plateau of Palakonda range there is a little sal and in all eleven patches of 680 acres are covered with a fair growth of this species. This is the southern limit of sal.

The Golgonda (Gudem) Agency—area about 800 square miles—is nearly all forest, but much of it is as yet almost unknown country. But it is now being rapidly opened up and a series of pakka metalled and bridged roads are under construction by a special branch of Public Works Department. At Chintapalli which has been fixed as the headquarters of subordinate officers of all departments (Forest, Public Works Department, Revenue, Medical and Police) pakka buildings are under construction or will be constructed in the near future. In this tract the District Forest Officer is styled Special Forest Officer and works under the Agent to the Governor.

The plains portion of the district has numerous isolated hills and such of them as are reserved forests are well wooded and are divided into about sixteen felling series for supply of small timber and fuel.

None of the forests either in the plains or agency has contour maps by the Survey of India and forest work has been greatly hampered in consequence.

Area—	SQ. MLS.
Reserved forest	307
Reserved lands	2

How the forest district is split up into subordinate administrative charges.—The whole Forest division except Golgonda Agency range is split up into two ranges consisting of 24 beats under eight sections.

N.B.—The following figures include figures for Golgonda Agency portion also.

Cost of administration—

	Rs.
District Forest Officer	9,537
Rangers	5,451
Subordinate staff	10,767
Clerical and menial staff	7,083
Miscellaneous including contingencies	11,837
Total ...	44,675

Cost under other important heads—

Timber operations	6,037
Road—New works	1,245
Do. Repairs	766
Regeneration	430
Protection from fire	485
Building—New works	509
Do. Repairs	1,535
Other miscellaneous items including pay of watchers	4,782
Demarcation	545
Surveys—Local	58
Total ...	16,392

Income from main sources—By Forest Department—

Timber	16,557
Firewood	6,025
Bamboos	17,831
Grazing	2,644
Other minor produce	7,127
Miscellaneous revenue	4,526
	54,710
Deduct refunds	107
Net total ...	54,603

By Revenue Department—

Timber	1,048
Firewood	1,300
Other minor produce	2,043
Total ...	4,391
Grand total ...	58,994

The chief work done in the Forest district—Plains.—Supply of small timber, fuel and bamboos to the population near the forest. Some fair quality small timber mostly sal is worked from Palakonda range where a new road system has been completed. This sal area is the only source of supply of big timber which fetches a very good price, as it is very much used all over the taluk for house building purposes.

Golgonda Agency.

A start has been made to work mature selected portions of the accessible Agency forests for big timber for sale at Narasapatam (Vizagapatam district). The small forest staff is concerned to restrict unauthorized shifting cultivation (podu) by hillmen.

Upper Godavari.

Description.—The forest division lies entirely in the Koya Agency on the left bank of the Godavari river. It contains many broken hill ranges. The elevation is from 200 feet to 4,466 feet. The tract is highly malarious and occasional cases of black-water fever also occur. The forest is deciduous, and contains teak, *Terminalias*, *Pterocarpus marsupium*, *Hardwickia binata*, *Kydia* and a few rose-wood and satinwood. Bamboos specially *Dendrocalamus* are very abundant in the south and east part of the division in what are called the Rekapalli hills. The Godavari river (with its tributary the Sabari) is the main line of communication with the outside world. The District Forest Officer's headquarters are at present at Kunavaram but he is permitted to spend six weeks either at Rajahmundry or Cocanada when his office also moves there. Bhadrachalam has been chosen as the new headquarters, but the building works have not yet been taken on hand. Change of the headquarters to Bhadrachalam is a change very urgently needed in the interests of the health and comfort of the District Forest Officer and his staff.

Area.—Reserved forests 830 square miles. In addition about 370 square miles of unreserved lands are under the control of the Forest Department.

How the Forest district is split up into subordinate administrative charges.—The whole forest division is divided into six ranges consisting of 53 beats under fifteen sections.

Cost of administration—

	Rs.
District Forest Officer and Extra Assistant Conservator	24,514
Forest rangers	17,023
Subordinate staff	22,296
Clerical and menial staff	13,545
Miscellaneous including contingencies	2,842
Total ...	80,220

Cost under other important heads—

	Rs.
Timber operations	5,980
Firewood	89
Demarcation	1,322
Feed and keep of cattle	2,435
Regeneration	3,526
Protection from fire	4,512
Roads—Original works	1,107
Do. Repairs	677
Buildings—Original works	1,634
Do. Repairs	2,680
Other miscellaneous items including reserve watchers	8,339
Total ...	32,301

Income from main sources—By Forest Department—

Timber	7,142
Firewood	812
Bamboos	16,498
Grazing	8,272
Other minor produce	3,959
Miscellaneous revenue	4,062
	40,745
Deduct refunds	112
Total ...	40,633

By Revenue Department.—Nil.

The chief works done in the district are (i) timber exploitation (coupes worked departmentally in reserves), (ii) regeneration mainly teak—both artificial and natural, (iii) reservation of additional timber bearing areas (about 68 square miles). A special duty extra Assistant Conservator of Forests was engaged throughout the year selecting and demarcating new blocks—The work is now completed. Draft notifications under section 4 for six blocks in 1929–30 and for eleven blocks in 1930–31 have been submitted. Seven blocks were notified under section 4 and one block was settled and draft section 16 notification for this block was submitted.

Fire-protection.—The Koyas and Reddis, who alone are employed on this work, were paid rewards to the extent of Rs. 806 for successful protection of forests in addition to wages for line-cutting.

Bamboo coupes which are leased out produce a good revenue.

Lower Godavari.

Description.—Divisible into three zones—(*a*) the mangrove swamps of the Godavari delta, (*b*) the central laterite belt containing mixed deciduous forests, (*c*) the Rampa Agency and the Papi Hills (2,000 feet) containing timber and bamboos. Rajahmundry is the biggest market for timber and bamboos on the East Coast.

Area.—Reserved forests 571 square miles.

How the forest district is split into subordinate administrative charges.—The whole Forest division is divided into five ranges consisting of 19 sections and 54 beats.

Cost of administration—

	Rs.
Pay of District Forest Officer	10,395
Pay of Special Forest Officer (Rampa)	8,333
Pay of rangers	10,159
Pay of rangers (Rampa)	900
Pay of subordinate staff	21,176
Pay of subordinate staff (Rampa)	3,981
Clerical and menial staff	8,662
Clerical and menial staff (Rampa)	792
Allowances—Non-voted	2,150
Do. Voted	10,752
Miscellaneous including contingencies	5,398
Total ...	82,698

Cost under other important heads—

Timber operations	668
Feed and keep of cattle	755
Roads—Original works	4,826
Do. Repairs	1,537
Buildings—Original works	3,277
Do. Repairs	1,854
Demarcation	4,057
Regeneration	590
Sowing and planting	2,111
Fire-protection	2,168
Rent on leased forests	4,465
Forest surveys	2,112
Other miscellaneous items including pay of watchers	13,831
Total ...	42,251

Income from main sources—By Forest Department—

	Rs.
Timber	15,630
Firewood	51,004
Bamboos	91,143
Grazing	17,784
Minor forest produce	36,968
Miscellaneous revenue	15,476
	2,28,005
Deduct refunds	2,481
Net Total ...	2,25,524

By Revenue Department—

Timber	7,217
Firewood	1,445
Minor forest produce	23,644
Total ...	32,306

The chief work done in the forest district.—Supply through coupe contractors 4,000 tons of mangrove fuel to Cocanada town and port and other towns of the delta.

Supply through coupe contractors of small timber, fuel and bamboos to Rajahmundry, Peddapur, Samalkot and other places in Rajahmundry and Peddapur taluks from a number of reserved forests in the plains and detached hills of these taluks. Rampa produce good deal of timber and bamboos and minor forest products which are extracted and collected by hillmen and removed by purchasers from whom seigniorage is collected.

Rampa bamboos find their way to all parts of the delta to Kistna and even to Guntur. Chief among the minor products from Rampa is tamarind. This is exported to Guntur and Kistna districts also. There are two teak felling series in Polavaram range which supply Ellore and other markets, via., Rajahmundry. Introduction of sandal to a small extent and of teak on a larger scale in Tirumalayapalem, Sudikonda and Mallavaram reserves of Gokavaram range and in Ammayagoppu valley of Peddapur range.

Guntur.

Description.—The division includes the whole of the Guntur and Kistna Revenue districts. There is a belt of mangrove swamp forests along the coast partly in the Guntur and partly in the Kistna districts.

It supplies good quality fuel which is taken to towns like Bezwada, Tenali and Masulipatam and also to big villages in the delta taluks of Tenali, Repalle and Divi. Part of this fuel is utilized by factories (mainly brick factories).

The reserved forests in the west and north-west of Guntur district are mostly on low hills and are worked for the supply of a little small timber, but mainly fuel and grazing to the local population. These forests extending for miles along the Kistna river are of great climatic importance.

The Kondapalli reserve (in Kistna Revenue district) is also worked for small timber, fuel and bamboos, and supplies the requirements of Bezwada.

Area.—Reserved forests, 904 square miles, 612 square miles under Forest Department and 292 square miles under panchayat management.

How the forest division is split up into subordinate administrative charges.—The whole division is divided into four ranges consisting of 55 beats and 16 foresters for sections, etc.

Cost of administration—

	RS.
District Forest Officer	10,925
Forest rangers	8,505
Subordinate staff	20,174
Clerical and menial staff	11,669
Miscellaneous including contingencies	4,423
Total ...	55,696

Cost under important heads—

52. A. Capital—Sowing and planting	1,583
52. A. Capital—Road—Repairs	1,895
52. A. Capital—Buildings—Original works ...	185
52. A. Capital—Buildings—Repairs	881
Stores	240
Regeneration	165
Other miscellaneous items including pay of watchers	14,969
Total ...	19,918

Income from main sources—By Forest Department—

	Rs.
Timber	666
Firewood	55,448
Bamboos	6,913
Grazing	47,523
Minor forest produce	5,331
Miscellaneous revenue	14,533
	1,30,414
Deduct refunds	—41
Net Total ...	1,30,455

By Revenue Department—

Timber	1,828
Firewood	8,887
Minor forest produce	15,923
Total ...	26,638

The chief work done in the forest district.—A large number of fuel coupes are worked through contractors. But a good deal of the activity of the staff has to be devoted to the protection of the forests from illicit fellings of small timber, fuel and yepi leaves for fodder and also in preventing illicit grazing. On account of extreme pressure for grazing, a large area of the reserves has to be closed to sheep grazing in order to give a chance to cattle. As in the upland taluks there are vast herds of sheep maintained by professional breeders (Gollas), it is a matter of great difficulty to prevent illicit grazing of sheep in areas closed to this animal.

Nellore.

Description.—This division may be divided into three distinct regions.

(1) The ranges of Udayagiri and Rapur in which the forests lie on the hills which form the district boundary and the small ridges

running out from these hills, (2) Sriharikota Island, and (3) the forests of Sathiavedu range. Of these three regions the first two lie in Nellore district and the last in Chingleput district.

Of these three, the forests in Sriharikota Island are by far the most important. The area of the reserved forest is 25,317 acres lying between the Bay of Bengal and Pulicat lake. The soil is of pure sand mixed with humus in the wooded areas, and along the banks of Buckingham canal it is alluvium. The reserved forest consists of a crop of evergreen scrub species of varying density. Along the sea coast, there is no growth at all. As one comes westwards towards the island, the growth improves and towards the western boundary it becomes less dense. The best density will give an outturn of 25 tons per acre. There are seven fuel working circles under working, the total annual area under felling being about 1,250 acres.

Along the belt of pure sand on the sea coast, casuarina is being raised. In 1929–30 the first plantation of 50 acres was established. In 1930–31 the second plantation of the same area was put in. Minor forest produce is collected by Yanadis who are under Government control.

Transport from the fuel coupes to the Buckingham canal is by 2 feet gauge light tramway as carting is impossible in the sand. From the canal bank to Madras the produce is boated at about Rs. 3–8–0 per ton.

From its advantageous position on the Buckingham canal, this forest has been worked for fuel from a very long period and its produce makes a very definite contribution to the fuel supply of Madras.

Sathiavedu range.—There are seven separate blocks of forests which go to make up this range containing no less than 24 fuel felling series, in 19 of which, annual coupes are under working. The remaining five series, situated in Allikulli reserved forest cannot at present be economically worked.

Some of the produce from this range supplies large towns and villages in Ponneri and Tiruvallur taluks and some is taken to Madras via Tada the Pulicat lake, and the Buckingham canal.

The two ranges of Udayagiri and Rapur have their forests in the Veligonda and Yerragonda hills. The latter are merely the foot-hills of the former. The forests on these hills are of protective value but cannot at present be worked as the lead to the nearest railway station is about 40 miles.

The plain portions along the foot of the hills is divided into a large number of grazing units called kanchas. These kanchas are of varying areas and the grazing is limited to 2 acres per cow unit.

Area.—The total area of the Forest division is 744 square miles which is divided into 4 ranges, 8 sections and 29 beats.

Cost of administration—

	Rs.
District Forest Officer	12,739
Establishment (including rangers, protective and clerical staff)—Pay and allowances	32,556
Miscellaneous including contingencies	4,623
Total ...	49,918

Cost under other important heads—

Minor forest produce	8,884
Roads—Original works	100
Do. Repairs	1,297
Feed and keep of livestock	38
Buildings—Original works	219
Do. Repairs	2,521
Regeneration	67
Fire-protection	300
Demarcation	255
Sowing and planting	1,709
Other miscellaneous items including pay of watchers	9,174
Total ...	24,564

Income from main sources—By Forest Department—

Timber	12
Firewood	77,845
Grazing	21,739
Other minor produce	13,120
Miscellaneous revenue	10,938
	1,23,654
Deduct refunds	752
Net Total ...	1,22,902

By Revenue Department—

	Rs.
Timber	1,733
Firewood	1,666
Minor forest produce	6,297
Total	9,696

Srihariкota is by far the most important range in the division. Its fuel revenue is about Rs. 65,000 per annum. The other activities are the departmental collection of minor forest produce and the raising of casuarina.

WALTAIR,
26*th August* 1931.

G. C. ROBINSON,
Acting Conservator of Forests, First Circle.

ANNUAL ADMINISTRATION REPORT OF THE FOREST DEPARTMENT

FOR THE

YEAR ENDING 31ST MARCH 1931.

SECOND CIRCLE

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

(i) ALTERATION IN AREA.

1. *Reserved forests.*—The total area of reserved forests increased from 5,838 square miles to 5,914 square miles. The increase is due to the transfer from First Circle of the whole of Kanigiri range of *Nellore* division to *Kurnool South* division of this Circle from 1st April 1930 and to adopting resettlement figures for the area of certain reserves in the Kudligi taluk of *Bellary* district. The reconciliation of area figures in Hospet taluk alone is still under correspondence.

2. *Reserved lands.*—An area of 33 square miles was declared 'reserved lands' by the Collectors of *Anantapur*, *Cuddapah* and *Kurnool* under section 26 of the Forest Act and was placed under panchayat management.

(ii) FOREST SETTLEMENT.

3. Nil.

(iii) DEMARCATION.

4. The reclearance of boundaries was as usual done by the subordinates free of cost over a distance of 2,879 miles.

A distance of 783½ miles was cleared at a cost of Rs. 479 in the divisions noted below:—

	RS.
Kurnool East (52 miles)	167
Kurnool South (13 miles)	84
Kurnool West (709 miles)	179
Cuddapah North (7 miles)	29
Cuddapah South (2½ miles)	20

(iv) FOREST SURVEYS.

(a) *By the Survey of India Party.*

5. Nil.

(b) *By the Madras Survey Party.*

Nil.

(c) *Local Surveys.*

The survey of coupes was as usual done departmentally. Reference maps were maintained in all the divisions.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

(i) REGULATION OF MANAGEMENT.

Preparation and control of working plans.

(a) PREPARATION.

6. The total area under departmental control is 4,464 square miles. Working plans existed for 2,681 square miles; a plan for 262 square miles comprising the whole of Giddalore range and portion of Gundlakamma range of *Kurnool South*, was sanctioned in Chief Conservator's Proceedings No. 306, Press, dated 4th June 1930. Working plans for *Kurnool West* (854 square miles) and *Cuddapah South* (558 square miles) have been prepared. The former is pending sanction while the latter is pending submission to the Chief Conservator. A working scheme sanctioned by the Conservator is in force for 9 square miles in *Kurnool South* division. The remaining 100 square miles (51 square miles of panchayat reserves resumed in *Kurnool East* and 43 square miles of Kanigiri range transferred to *Kurnool South* division, and 6 square miles of Chennulapalle reserve in *Cuddapah North*) is not covered by any working plan at present. Proposals are under consideration either for including them with existing sanctioned plans or for preparing separate ones.

(b) *Control.*

7. Working plan prescriptions were followed with very few exceptions. Ten new fuel series opened in *Cuddapah North* division as mentioned in the previous year's report were worked during the year and addendum to the working plan will be sent up.

(ii) Communications and Buildings

(a) *Roads and Bridges.*

8. *New works.*—The expenditure on ' New works ' was Rupees 9,137 against Rs. 3,517 of the previous year. The most important work completed in the year is the Sudem-Adutla road in *Kurnool West* division commenced in the year 1929–30. The total length of it is 8 miles 4 furlongs and 5 chains and the cost was Rs. 9,960. The original alignment for this road was made in 1927.

Construction started on 17th October 1929 from Adutla under the personal supervision of the Conservator and some minor alterations in the first mile of the trace were made.

An estimate of cost was prepared in October 1929 for Rs. 10,000 providing for a 12-feet road on 8-feet cutting over a length of 8 miles and 5 furlongs.

Later, a deviation to take the road along the Sudem valley was ordered and was approved by the Conservator, on 13th December 1929. Revision of the estimate followed because the new alignment was longer by 19 chains and at this time it was ordered that the road be made 16 feet wide on 8 feet cutting.

A camp at Lingamayyapenta (third mile) housed the workmen in November-December 1929. Water failed by the end of December 1929 and work there had to be given up. Sura Sudem (seventh mile) then was the only source of water and work was commenced there in January 1930.

During 1929–30 Rs. 2,881 was spent on four miles of road.

The work made no head-way till August 1930. It was then pushed through and by the 10th December 1930, the whole length was completed except for some blasting and drains. A motor car ran from Velgode to Gundlabrahmeswaram on 10th December 1930 and two cars and two buses passed on 21st December 1930.

During 1930 the staff and road coolies suffered severely from malaria. Forester L. Joseph died on 26th November 1930 and eight foresters on the road-work went on leave. Four coolies died (in one instance the Collector of Kurnool defrayed the expenses of disposal of the body). There was great difficulty for staff and coolies in this dreaded locality also with drought and excessive rain. The final result reflects credit on Mr. D. L. Sathe, District Forest Officer, Ranger B. H. Anandatnirtha Rao and Forester B. Venkata Rao, M.R.H.

In Cuddapah North division a bridlepath of 4 miles 2 furlongs to connect Chinnaletipatibhavi in the Nallamalais of Vonipenta range with Jothi in Porumamilla range was constructed during the year.

A new road three-fourths mile long in *North Cuddapah* division, to connect Korthimadugu in *South Cuddapah* division with the Kanamalopalli-Chintharajupalli forest road near Dasarladoddi, was constructed during the year, at a cost of Rs. 1,344.

In *Cuddapah South* division new works were undertaken at a cost of Rs. 715 as shown below :—

	Rs.
1. Formation of Korthimadugu-Dasarladoddi road in the limits of Cuddapah range (distance 2 miles, 3 furlongs, 4 chains)	581
2. Realignment of the Kootalamarri-Salivendla bridle-path	11
3. Realignment of the Kootalamarri-Chintalachilaka bridle-path	10
4. Rebuilding the fallen revetment wall on Balapalli-Papanasanam road in the seventh furlong of the fourteenth mile	113
	715

9. *Maintenance.*—The total length of all roads, cart-tracks and bridle-paths in the whole Circle was 918 miles 5 furlongs constructed at a capital cost of Rs. 2,25,644, of which 236 miles were repaired during the year at a cost of Rs. 6,010, against Rs. 4,770 of the previous year. The increased expenditure was in *Kurnool East* and *Cuddapah South* divisions—in the former extensive repairs were done to the Dornal-Peddachama ghaut road and Mantralakanama ghaut road; in the latter some of the roads in the Seshachalam Hills, reported to be in a very bad condition in last year's report, were repaired to the extent of the funds available.

10. The District Forest Officers have certified that all the *important* roads are maintained in a fair state of repairs. Sufficient funds were not available for maintaining *all* roads.

(*b*) *Buildings.*

11. The expenditure on new works and improvements was Rs. 10,684 and that on repairs (including pay of watchers) was Rs. 9,602 against Rs. 15,006 and Rs. 8,239 respectively of the previous year.

12. The chief new works including improvements were:—

Anantapur.

	Rs.
Improvements to the combined Ranger's quarters and office at Madanapalle	507
Additional compensation awarded by the Sub-Court, Chittoor, for the building and site acquired last year for the above	1,699
	2,206

The old Range office at Madanapalle which had a book value of Rs. 3,068 was sold by auction for Rs. 6,020.

Kurnool East.

Completion of the combined Range office and quarters with out-houses at Ganjivaripalli ...	525
Completion of the range clerk's quarters at Ganjivaripalli	282
Completion of quarters for two forest guards and one peon at Ganjivaripalli	663
Construction of an inspection shed at Mogulutla with out-houses	520
Construction of a latrine at Dornal for the old Dornal Range office building	26
	2,016

Kurnool South.

Improvements to the rest house at Isukagundam ...	1,400
Fencing the Range office compound at Sirvel ...	47

Kurnool West.

Improvements to District Forest Officer's residence at Kurnool	117

Cuddapah North.

Construction of Range quarters at Vontimitta ...	2,610
Tiling Chinnaletipattibhavi rest-house ...	320
Providing air-valve to the pipe system in District Forest Officer's residence	61
Construction of a latrine at Kondur	21
Construction of platform for building a rest-house at Kanamalopalli	166
	3,178

Cuddapah South.

	Rs.
Completion of Rajampet Ranger's quarters ...	1,449
Construction of a compound wall to the Ranger's quarters at Rajampet	238
Construction of a latrine to Guvvalacheruvu rest-house	25
Land acquisition for Forest Guard's shed at Rajakunta	2
Registration of land sale-deed for Kodur tanah ...	6
	1,720

13. There were 383 buildings valued at Rs. 5,26,577 on the books at the end of the year; of these 202 buildings were repaired at a cost of Rs. 6,122 against Rs. 4,730 last year. The increase is due to the transfer of Kanigiri range from First Circle during the year and to repair of a larger number of buildings in *Cuddapah South* division following damage by unusually heavy rains.

14. The District Forest Officers have certified that all buildings have been kept in a fairly satisfactory state of repairs, during the year.

(*c*) *Miscellaneous.*

15. The expenditure of Rs. 555 on new works represents the sums spent on the following works :—

	Rs.
Kurnool East.	
Deepening the well at Rollapenta	10
Constructing a water trough near Chinnamantrala.	45
Kurnool West.	
Improvements to the well in the Range compound of Sivapuram range at Atmakur	55
Cuddapah North.	
Construction of a well at Kondagorlapenta ...	407
Putting up a fence to the tube-well at Chinnaletipatibhavi	38

16. There were 143 wells representing capital expenditure of Rs. 33,422 at the close of the year.

Twelve wells were repaired at a cost of Rs. 112 against 24 wells at a cost of Rs. 458 in the previous year.

(iii) Protection of Forests.

(a) *General Protection.*

17. The total number of offences reported during the year (both reserves and unreserves) was 3,742 against 3,867 of the previous year. The difference of 125 is not appreciable. It pertained to reserves and all divisions contributed except the two *Cuddapahs*. The statement below compares the offences reported during the year with the previous year:—

	By Forest officers.		By Revenue officers.		Total.	
	1929-30.	1930-31.	1929-30.	1930-31.	1929-30.	1930-31.
1. Injury to forests by fire.	128	81	6	7	134	88
2. Unauthorized felling.	1,908	1,719	860	860	2,768	2,579
3. Unauthorized grazing.	667	829	..	6	667	835
4. Other offences ..	256	180	42	60	298	240
Total ..	2,959	2,809	908	933	3,867	3,742

18. *Offences relating to reserves dealt with by Forest officers.*— There was decrease under all items except 'Grazing.' The decrease under 'Injury to forests by fire' was principally in *Anantapur*. The District Forest Officer explains that fire statistics have not been given the requisite attention by Range Officers and so the figures furnished by them, are not accurate.

The decrease under 'Unauthorized felling' was mainly in *Kurnool East* and *West*. It is attributed to the opening of a number of fuel coupes to meet local demand in *Kurnool East* and to better protection in *Kurnool West*.

The decrease under 'Other offences' was chiefly in *Anantapur* and has not been explained.

There was an increase under 'Unauthorized grazing' in all divisions except *Kurnool South*. This is attributed partly to the absence of rain in May and June 1930 in *Kurnool East* so that many ryots put off purchasing grazing permits at the beginning of the grazing season and partly to special patrol parties and surprise inspections by Range Officers.

19. *Sandalwood cases.*—Two cases were detected in Hospet range of *Anantapur* division. In one case, six men were removing illicitly by night 1,230 lbs. of sandalwood from Bandri reserve. The forest guard and watcher of the beat tried to seize the wood in the reserve but the leader of the gang threatened them with a

revolver. The subordinates withdrew and informed Ranger K. Raghuraman who seized the sandalwood when it was about to be booked by rail to Bombay. All the six accused were prosecuted and convicted. One important accused, a Muhammadan municipal councillor who is a habitual sandalwood smuggler, was sentenced to three months' rigorous imprisonment, and a fine of Rs. 100. The remaining five accused were fined in all Rs. 75. The sandalwood was confiscated to Government.

In another case 337 lbs. of sandalwood was stolen from Gunda reserve of Hospet range by a habitual smuggler. It was booked to Wadi Bandar (Bombay), but was seized at Hospet railway station. The accused died before the trial and is said to have been murdered by a rival gang. The sandalwood was confiscated.

Liberal rewards were granted to all concerned in these two cases including the police inspector and the assistant stationmaster.

20. *Offences during the civil disobedience movement.*—There were four cases in Balapalle range of *Cuddapah South* division. All the accused numbering 15 were convicted. The matter was handled promptly by the District Forest Officer and his staff. Rewards were given to Rangers S. Sankaran and T. Paramasivam Pillai and to some sixteen others, for good work in this connexion.

21. *Offences relating to unreserves dealt with by Revenue officers.*—These exclude offences relating to reserves under panchayat management. The increase of 25 cases calls for no remark.

22. *Cases relating to reserves brought to trial.*—

Year.	Number.	Conviction.	Acquittals.	Percentage of acquittals.
1929-30	862	282	466	54·0
1930-31	1,143	429	501	43·8

Out of 501 cases shown under acquittals 479 cases were settled by the payment of compounding fees in court.

23. *Cases relating to unreserves brought to trial.*—

Year.	Number.	Conviction.	Acquittals.	Percentage of acquittals.
1929-30	175	42	117	66·8
1930-31	221	49	161	72·7

The increase in the number of acquittals is due to the payment of compounding fees in the court in respect of 145 cases out of 161 cases acquitted.

24. The percentage of offences enquired into by the District Forest Officers and Range Officers personally is given below:—

Division.	District Forest Officer's percentage.	Range Officer's percentage.
Anantapur	0·5	4·5
Kurnool East	0·9	15·0
Kurnool South	4·3	31·3
Kurnool West	1·0	9·5
Cuddapah North	1·1	11·7
Cuddapah South	0·7	17·3

25. The amount of compounding fees realized in 2,822 cases compounded during the year was Rs. 39,667 against Rs. 46,303 in 2,935 cases of the previous year. This works out to an average of Rs. 14-0-10 per case against Rs. 15-12-1 in the previous year. The instructions issued in G.O. No. 990, Revenue, dated 13th June 1910, were followed in fixing the compounding fees.

26. *Patrol system.*—The system of ' Surprise ' patrols by Range Officers and the subordinates of neighbouring beats continued during the year with very satisfactory results in all the divisions as shown below:—

	Number of cases detected. 1929–30	1930–31
Anantapur	3	65
Kurnool East	15	70
Kurnool South	102	249
Kurnool West	50	103
Cuddapah North	33	91
Cuddapah South	28	136
	231	714

27. *Rewards.*—In *Anantapur* Rs. 470 was disbursed during the year. The recipients were the Prosecuting Sub-Inspector of Police, Hospet (Rs. 50), Assistant Stationmaster (Rs. 50), Hospet Ranger (Rs. 300), one forest guard (Rs. 40) and one watcher (Rs. 30) for good work in the two sandalwood cases referred to in paragraph 19 supra.

In *Cuddapah South* division rewards were granted to two Range Officers (Kodur and Balapalle) their subordinates and two outsiders in four cases of civil disobedience in Balapalle range to the extent of Rs. 199-8-0.

(*b*) *Protection from Fire.*

28. The areas attempted to be protected in the fire season of 1930 and those actually protected are shown in Form No. 31, the number and origin of fires being given in Appendix A.

29. *Special protection.*—The area under special protection was 104 square miles against 96 square miles of the previous year and the cost of protection was Rs. 206 against Rs. 229 in the previous year. The increase in area was in *Cuddapah South* division. An area of 84 square miles was successfully protected during the year against 83 square miles in the previous year, the percentage of success being 80·4 against 86·1 in the previous year.

30. *Early-burning.*—Early-burning was done in all the divisions. The total area dealt with during the year was 594 square miles against 442 square miles last year. The average cost of the work was Rs. 4-6-1 per square mile against Rs. 7-9-11 last year.

There was an increase in the area early-burnt in all divisions except *Kurnool West* and *Cuddapah North*. This was partly due to the addition of Kanigiri range and partly to the transfers of large areas, from general protection.

The total area burnt by late incendiary fires in the early-burnt portions was about 10 square miles during the year or 1·1 per cent of the area dealt with. In *Anantapur* and *Kurnool South* divisions it is reported that the number and extent of fires furnished by the Range Officers were not accurate.

31. *General protection.*—The area under general protection was 3,780 square miles against 3,844 square miles in the previous year. The decrease was in *Kurnool South* and *Cuddapah South* divisions due to the transfer of large areas under ' Early-burning.' The area successfully protected during the year was 3,650 square miles against 3,606 square miles in the previous year, the percentage of success being 96·5 against 93·8.

The only remaining sylvicultural experimental plot at Isukagundam in *Kurnool South* (Mr. Kesava Vittal's clear-felling of timber-cum-bamboo forest following by burn and rab-sowing) was fire traced. In *Kurnool West* division all the experimental plots in the Gundlabrahmeswaram plateau and the new 5-acre plot was also fire traced.

The question of fire-protection in the two *Cuddapahs* referred to in the previous year's report remains to be solved. The area burnt during the year was larger in *Cuddapah South*. This is attributed to the grass-cutters and men who illicitly graze cattle in the coupes with or without the connivance of the beat guard. They set fire to the grass in the coupes to get fresh grass immediately after the first soaking rain. Some fires are due to jealousy between coupe contractors. In one case of malicious firing in *Cuddapah South* the accused was apprehended and a compounding fee of Rs. 10 was levied and collected from the accused. The circumstances have not been reported but the penalty appears

grossly inadequate as the proper course in such cases is to put the accused up before a first-class Magistrate and press for a sentence of two years' imprisonment with fine. The District Forest Officer, *Cuddapah South*, has not explained why he did nothing to close to grazing the areas which were burned, despite the fact that the total area burnt in his division during the year was 23,876 acres against 17,654 acres last year, although this point was emphasized by the Chief Conservator while reviewing the last year's report.

(c) *Protection against Cattle.*

32. Out of 4,469 square miles of reserves under departmental control, 4,250 square miles were opened to grazing of all animals except goats for the whole year, and 39 square miles were opened for part of a year against 4,207 square miles and 15 square miles respectively of previous year. The area closed to grazing for the whole year was 178 square miles and part of the year 2 square miles against 166 square miles and 2 square miles respectively of the previous year. The difference in the areas opened and closed to grazing as compared with the previous year was mainly in three *Kurnools*—in *Kurnool East* due to resumption of panchayat areas in *Kurnool South*, due to transfer of Kanigiri range from First Circle, and in *Kurnool West*, due to the new working plan.

33. Grazing permits were issued on payment to 395,337 animals against 442,276 in the previous year. All divisions except *Kurnool South and Cuddapah North* contributed to the decrease which is explained as due to a less number of foreign cattle coming to the hills.

34. The incidents of grazing as reported by the District Forest Officers was:—

	Acres per cow unit.	
	1929-30.	1930-31.
Anantapur	4·44	5·6
Kurnool East	10·2	12·0
Kurnool South	10·5	11·9
Kurnool West	7·1	7·8
Cuddapah North	8·8	8·5
Cuddapah South	11·4	10·5

35. The number of cattle impounded during the year was 28,350 against 28,484 of the previous year.

36. During the year the Kanigiri villagers represented to the Collector of Nellore their difficulties arising out of the kancha system of grazing management. They asked that it be abolished in

favour of permits. The Conservator made a special tour in Kanigiri range and recommended the permit system of grazing. The Collector of Nellore agreed to this proposal as a temporary measure for the year 1930–31 only and so it was done, refunding the amounts realized in respect of three kanchas which had been sold.

(d) Protection against injuries from natural causes.

37. In *Anantapur* the eradication of lantana in the plateau beat of Horsleykonda reserve was continued free of cost by the guard and watcher.

In *Kurnool South*, the subordinates cut climbers on standards and seedlings in all worked coupes.

In *Cuddapah South* thorny creepers were cut by subordinates as far as practicable. In some of the coupes Strobilanthes was uprooted by the subordinates.

In *Kurnool East* there has been neglect of climber cutting for years past.

CHAPTER III.—SYLVICULTURE

SECTION I. AFFORESTATION AND REGENERATION.

(1) General progress of areas under regeneration.

38. These areas comprise—

(*a*) felled coupes,

(*b*) sandal propagation plots, and

(*c*) stump planting of teak in *Kurnool West*.

39. The year 1931 was a bad seed year in *West Kurnool* division for teak, *Pterocarpus marsupium*, *Terminalia tomentosa* and rosewood and seed had to be obtained from elsewhere for 1931 sowings. Coppice regeneration was generally good. In the stony arid and over-grazed forests of *Anantapur* seedlings are scarce and such as persist are cut back by browsing and fires. The District Forest Officer says it is too soon to comment on the result of *rab* sowings but in *Cuddapah North* and *Kurnool East* some promising *rab* sown seedlings have been seen by the Conservator. The need is felt for after-care of the seedlings. It may be said that *Anantapur* is ahead of other divisions in sandal propagation work, the results being very promising. The established sandalwood in all divisions has made progress.

(ii) *Establishment of Reproduction under Working Plans or Schemes.*

(*a*) Mainly natural.

40. Reproduction by coppice shoots continued fairly satisfactory. Natural reproduction by seed in felled coupes was unequal in different localities as usual. The system of cutting back advance growth of good species in combination with early-burning in order to expedite the growth of these natural seedlings is being pursued in all divisions.

(*b*) Mainly artificial.

41. *Measures for improvement of the stocking of good species.*—The measures include *rab* sowings (burning of felling debris in heaps or lines and sowing seeds, in the ash). These were started in 1928–29 in some divisions and in 1929–30 in the remainder. The original intention was to have all *rab* sowings done free of cost by the beat staff. After two years' experience it was found impossible to get it done free in all the ' timber ' and ' fuel ' coupes throughout the Circle and the Conservator ordered in January 1931 that District Forest Officers should personally supervise the work, under sanctioned estimate, in selected areas, in order to arrive at costs. In all remaining coupes *rab* sowings were to be done free by the beat staff to the extent possible.

(*c*) Afforestation.

42. *Measures to form sandalwood propagation plots.*—The work of forming these plots of one acre or a half acre each year in each beat continued. Some divisions have several years results to show : in others the work is newer. Valuable results are gradually being obtained. The three divisions of *Kurnool* are backward. The technique of these sandal sowings is now well understood.

(iii) *Plantations and other forms of Regeneration not under Working Plans or Schemes.*

43. The interesting plantations at Kupgal and Moka were seen by the Chief Conservator during the year. The former is now mainly *Hardwickia* and the latter *Dalbergia sissoo*. The small Kodur Red Sanders plantation, about 40 acres, started in 1865, cost approximately Rs. 2,100, and has furnished about Rs. 19,500 in revenue. Sandalwood is spreading in it. Mr. Wood's Kurnool Teak plantations, made in order to provide regular work for Chenchus and never regarded as a ' commercial ' undertaking, cost some Rs. 3,25,000, and have produced about Rs. 34,000 in revenue. The growth in different localities is unequal, but some of the plantations are thriving. No regular plantations are being made now, nor for many years past in this Circle.

(iv) *Tending.*

44. *Anantapur.*—Lantana was uprooted over about 20 acres of Lantana Block II in Horsleykonda reserve free of cost by the beat staff. Tending of sandal plots and climber-cutting in sandal coupes were also done free of cost.

Kurnool East.—Nil.

Kurnool South.—Creepers were cut by subordinates from standards and coppice shoots in worked coupes.

Kurnool West.—The old teak plantations and 5-acre experimental plots were maintained at a cost of Rs. 175.

Cuddapah North and South.—Tending was done free in the felled improvement coupes as usual by the beat staff.

(v) *General.*

45. The teak trees at Kangamadugu, the mahogany at Kodur, Mogilipenta, Kangamadugu and the Eucalyptus at Mogilipenta planted years ago as an experiment on a very small scale are reported to be thriving. The small mahogany and Acrocarpus plantations at Horsleykonda were thinned during the year.

CHAPTER IV.—EXPLOITATION.

(*a*) System of Management.

(i) *Major Forest Produce.*

46. Sylvicultural systems in force were—

(i) Clear-felling followed by artificial regeneration.
(ii) Simple coppice.
(iii) Coppice with standards.
(iv) Improvement fellings.
(v) Selection fellings.
(vi) Improvement cum clear-felling.

47. (i) *Clear-felling followed by artificial regeneration under the high forest system.*—This was confined to two coupes of 15 acres each, one in the High Forest Working Circle at Gundlabrahmeswaram and the other in Nandiyal range. These coupes were clear-felled and have since been sown.

(ii) *Simple coppice.*—In fuel coupes an area of 606 acres in *Anantapur*, 560 acres in *Kurnool East*, 938 acres in *Kurnool South*, 2,343 acres in *Cuddapah North* and 2,507 acres in *Cuddapah South* were exploited during the year.

(iii) *Coppice with standards.*—The areas dealt with under this system were 18 acres of Moka plantation (Sissoo) in *Anantapur*, the Pole forests of Gundlakamma and Giddalore ranges (464 acres) in *Kurnool South*; 1,636 acres in *Kurnool West*, and 142 acres in *Cuddapah North*.

(iv) *Improvement fellings.*—In *Anantapur* an area of 302 acres was worked under this system in Ganganapalle and Vempalle ranges coupled with artificial regeneration. In *Cuddapah North* and *South* the areas dealt with were 1,757 and 3,073 acres respectively. Of the above 3,073 acres, 2,724 acres represent the area of Red Sanders forests of *South Cuddapah* division which were worked under this system.

(v) *Selection fellings.*—*Anantapur* division. The palmyra forest at Idupulapaya is worked under this system but owing to accumulation of unsold stock with the contractors no fellings were done during the year. An area of 314 acres was worked in the Pole Forest Working Circle, in which the stumps have to be trimmed for the production of coppice shoots.

Kurnool East—Selection Working Circle on a 10-year felling cycle.—Three coupes measuring 3,189 acres in extent of Ganjivaripalle range were exploited under this head. The one coupe in Turimella range was not worked for want of demand. In this working circle *Hardwickia binata* (yepi) trees of over 42 inches in girth were extracted for agricultural implements and building materials as well as trees of other species.

In Dornal and Turimella ranges softwood trees of 42 inches girth and above were marked for exploitation The coupe in Dornal range was not worked for want of demand and the contractor of the coupe of Turimella range felled a few trees only in the coupe, and did not remove anything.

Seven thousand six hundred and forty cubic feet of softwood was removed from Coupes 1 and 2 of Turimella range and 600 cubic feet of the timber from Coupe 2 of Dornal range which were worked in 1929–30.

Kurnool South.—Softwood (*Givotia rottleriformis*) was felled departmentally in Chelama and Sirvel ranges during the year and sold to the state-frame makers at Markapur, but owing to trade depression and incoming of supplies from Kallai and Trichur the demand for this timber was very poor during the year and further felling was suspended. There was no balance of felled timber at the close of the year. The Western India Match Factory was supplied with a sample of softwood logs, but owing to their strict specification they placed no order.

Cuddapah South division.—In four ranges mature inumaddi (*Terminalia tomentosa*) trees and thamba (*Shorea tumbuggaia*) trees of 48 inches and above in girth and red sanders of 28 inches and above in girth were extracted departmentally during the year. The timber was converted into posts of saleable sizes and in the case of red sanders trees found unsound for conversion into timber, the heartwood was converted into ' Doll wood ' (for dolls, images, toys, etc.). In Balapalle range mature yegi (*Pterocarpus marsupium*) and jalari (*Shorea talura*) trees were cut for conversion into felloes. These fellings were confined to selected blocks in each range.

(vi) *Improvement cum clear-felling—Kurnool East.*—Two coupes of 72 acres in Dornal range and one coupe of 17 acres in Turimella range were offered. The former two were leased but the contractors did not work them for want of demand. The coupe of Turimella range was leased in 1929–30 but as the contractor failed to work it, it was worked departmentally in 1930–31.

In the above coupes all trees are felled except teak, *Terminalia tomentosa*, *Pterocarpus marsupium*, *Dalbergia latifolia*, *Terminalia chebula* and *Sapindus emarginata*. These are retained as seed-bearers for five years. The felling refuse is heaped in lines, pressed and burned, for *rab* sowings.

Cuddapah South.—A consolidated working plan for the whole *South Cuddapah* division was completed at the end of the year, in accordance with which the following timber and fuel coupes were worked in 1930–31.

Timber.—Two improvement felling series in Kodur and Chitvel ranges. The area of the two coupes was 135 acres.

A coupe of another series called Kutalamarri Miscellaneous Pole Series (56 acres in extent) was sold at Rs. 1–4–0 per acre. The contractor failed to work and the lease was cancelled.

Fuel.—The first coupe in fourteen new felling series in Kodur, Rajampet, Cuddapah, Chitvel and Sanipaya ranges and an arrear coupe of Balapalle range measuring in all 1,445 acres were put to auction. Of these, Coupe I (54 acres) in Sanipaya range remained unsold and three other coupes (166 acres) though sold were not worked.

48. In Dornal and Turimella ranges of *Kurnool East* division dead-wood operations, viz., extraction of rafters, spokes and felloes of *Pterocarpus marsupium* and beams of *Hardwickia binata*, *Terminalia tomentosa* and *Bassia latifolia* were carried out.

49. For the whole Circle the total output of timber was 333,000 cubic feet and of fuel 9,890,000 cubic feet from reserved forests.

(ii) *Minor forest produce (including bamboos and grazing).*

50. Three methods of working were in vogue—

(1) departmental collection,

(2) on lease, and

(3) on permits.

51. *Leases.*—Bamboo coupes were leased in all divisions. The collection of minor forest produce was also effected through lessees. Tangedu bark (*Cassia auriculata*) was leased in all divisions for two years from 1st April 1930.

Rela bark (*Cassia fistula*) was sold on a rotation of five years in Ganjuvaripalle range of *Kurnool East* division and in Badvel range of *Cuddapah North* division in accordance with the working plan. There was no demand in other divisions. Nux vomica was leased for low sums where it was plentiful in *Anantapur* division, sold with other minor produce in *Kurnool East*, in two ranges in *Cuddapah North* and in one range only in *Cuddapah South* division. Two slab quarries were sold for the usual term of five years in *Kurnool West* division.

Tooki and platter leaves were sold in *Anantapur*, *Kurnool East* and *Cuddapah South* divisions. Tooki (*Diospyros*) leaves in *Cuddapah North* division fetched Rs. 2,237.

52. *Collection on permits.*—Permits were issued on seigniorage for removal of thorns, stones and gravel from reserves.

53. *Grass.*—Free removal of fodder and thatch grass from reserves in head-loads in all the divisions, and in cart-loads free, in the *Cuddapah* district only, was continued. A nominal fee of five annas per cart-load was levied for removal in cart-loads in *Anantapur* and three *Kurnool* divisions. In *Kurnool South* division alone Rs. 2,376 was realized by sale of 7,603 cart-loads of fodder and botha grass. Besides this, about 4,200 cart-loads of fodder and botha grass were removed by head-loads free. The concession of free removal of fodder grass was availed of to a greater extent in *Cuddapah North* and *Kurnool South* divisions.

54. *Manure leaves.*—Five hundred and ten cart-loads in *North Cuddapah* and 1,224 cart-loads in *South Cuddapah* were removed at Re. 1 per cart-load. Demand in *Kurnool South* and *West* divisions was not appreciable.

55. *Grazing.*—This was, as usual, controlled by permits, a single permit being valid for a whole range.

(*b*) Agency of Exploitation.

(i) *Departmental Agency.*

56. The outturn of major and minor produce by departmental agency is compared with that of the previous year in the following table :—

Year.	Timber in thousands of cubic feet.	Fuel in thousands of cubic feet	Bamboos—Value.	Minor forest produce—Value
			Rs.	Rs.
1929–30	57	324	347	134
1930–31	45	180	233	127

Decrease under timber was chiefly in the three *Kurnools*. This is due mainly to restricted felling in *Kurnool East* division for want of demand.

Decrease under fuel was mainly in *Anantapur*, *Kurnool West* and *Cuddapah South* divisions. This is due to stoppage of charcoal manufacture in *Anantapur* division as it was unprofitable, and in *Kurnool West* division as the supply of charcoal to Kurnool municipality was given up and to less quantity of produce being confiscated in the coupes of *Cuddapah South* division on the expiry of leases.

Decrease under ' Bamboos ' is due to the fact that in 1929–30 a quantity of bamboos worth Rs. 154 was extracted departmentally in *Kurnool West* division. Decrease under minor forest produce is due to the fact that in *West Kurnool* division the right of collection of minor produce was leased.

In *Anantapur* 3,691 lbs. of sandalwood were extracted and sent to Vellore for sale. The quantity sold was 1,672 lb. only and the sum realized was Rs. 661.

Similarly, 607 lbs. of sandalwood were sent to Vellore from *South Cuddapah* division; 279 lbs. were sold and the sum realized was Rs. 110.

The value of timber extracted departmentally was Rs. 23,483. Deducting the expenditure including overhead charges there was a profit of Rs. 7,601 which works out to As. 2–9 per cubic foot.

(ii) *By purchasers.*

57. The following statement shows the quantity of major produce and the value of minor produce removed by purchasers:—

Year.	Timber in thousands of cubic feet.	Fuel in thousands of cubic feet.	Bamboos.	Minor forest produce and grazing.
			Value.	Value.
			Rs.	Rs.
1929-30	626	8,445	72,967	5,60,122
1930-31	426	9,792	68,702	3,88,123

The decrease under timber was mainly under 'Unreserved lands' of *Anantapur* division and in the reserves and unreserves of *Kurnool West* division.

In the former it was due to fewer removals of trees on darkhast lands; while in the latter division the quantity of produce extracted was less than in the previous year due to dullness of the market.

The increase under fuel was due to a large outturn from the reserves of *Cuddapah South* division consequent on the opening of thirteen new fuel felling series, and to the increased yield of Nakkina, etc., fuel in Block I of Chitvel range.

The decrease under bamboos was mainly in *Kurnool West* division and it was due to trade depression.

The large decrease under minor produce including grass and grazing is due to—

(1) very few 'foreign' cattle came,

(2) the general fall in prices of tangedu bark, and the absence of demand for rela bark, toomki leaves, etc., owing to the present trade depression.

(iii) & (iv) *By free grantees and right-holders and under privileges.*

58. The following table shows the quantity and value of the produce removed under this head:—

	Timber.		Fuel.		Bamboos.		Minor produce and grazing.	
	In thousands of cubic feet.		In thousands of cubic feet.		Value.		Value.	
	1929-30.	1930-31.	1929-30.	1930-31.	1929-30.	1930-31.	1929-30	1930-31.
					Rs.	Rs.	Rs.	Rs.
Free grantees ..	28	46	1	..	425	388	51	448
Right and privilege holders.	..	..	..	..	..	..	3,853	3,826

59. *Free grants.*—Free grants were made from reserves and unreserves in all divisions chiefly for rebuilding houses burnt by fire.

The increase under minor produce and grazing is due to free grants valued at Rs. 434 made in *Kurnool East* and *South* and *Cuddapah South* divisions during 1930–31 against Rs. 23 only in the previous year.

60. *Rights and privileges.*—The Chenchus in the three *Kurnools* continued to avail themselves of the concessions granted to them at the forest settlement, viz., free removal of timber for their huts, of minor forest produce for their own consumption and of free grazing in respect of their own cattle including goats. The orders of the Chief Conservator have lately been received on Mr. A. V. Sundaram's report referred to last year in respect of the numbers of cattle owned by the Chenchus and cognate subjects. The settlers at Chelama, Diguvametta and Isukagundam continued to enjoy free grazing for their cattle under the terms of the licences issued to them for settling in reserved forests. The grazing concessions in the *North* and *South Cuddapah* divisions referred to in the previous year's report continued in force.

(*c*) Outturn and Sources of Forest Produce.

61. The total outturn from all agencies is compared in the following statement:—

Year.	Timber in thousands of cubic feet.	Fuel in thousands of cubic feet.	Bamboos, value.	Gross value of minor forest produce including grass and grazing.
			Rs.	Rs.
1929-30	711	8,770	73,741	5,64,160
1930-31	517	9,972	69,323	3,92,524

Important variations have been explained above.

CHAPTER V.—FINANCIAL RESULTS.

62. The following figures show the financial position of the Circle as compared with that of the previous year:—

	1930-31. Rs.	1929-30 Rs.
Receipts.		
Revenue	(*a*) 7,80,832	(*b*) 10,22,554
Deduct—Refunds ...	1,090	2,419
Net revenue ...	7,79,742	10,20,135

(*a*) Includes Rs. 771 credited in Fourth Circle.
(*b*) Includes Rs. 978 do.

	1930–31	1929–30
	RS.	RS.
Expenditure.		
Conservancy and maintenance	88,425	90,928
52-A. Capital outlay on forests	20,979	20,808
Establishments ...	440,240	4,23,847
Total ...	5,49,644	5,35,583

63. The following statement shows the financial position of each division during the year under report and a comparison of surplus or deficit with that of the previous year :—

Division.	1930-31.			1929-30.		
	Revenue.	Expenditure.	Surplus or deficit.	Revenue	Expenditure.	Surplus or deficit.
	RS.	RS.	RS.	RS.	RS.	RS.
Anantapur	2,22,056	73,691	+ 1,48,365	3,97,040	66,904	+ 3,30,136
Kurnool, East ..	53,402	68,033	— 14,631	61,204	76,202	— 14,998
Do. South ..	1,17,000	84,576	+ 32,424	1,38,053	87,202	+ 50,851
Do. West ..	1,45,025	1,06,399	+ 38,626	1,80,760	1,08,082	+ 72,678
Cuddapah, North ..	72,957	70,943	+ 2,014	85,498	75,159	+ 10,339
Do. South ..	1,69,232	83,550	+ 85,682	1,57,417	77,923	+ 79,494
Direction	70	62,452	— 62,382	163	44,111	— 43,948
Total ..	7,79,742	5,49,644	+ 2,30,098	10,20,135	5,35,583	+ 4,84,552

From the above statement it may be observed—

(*a*) *Kurnool East* division worked at a loss;

(*b*) all the other divisions were worked at a profit but that the amount of profit realized during the year under report was considerably reduced except in the case of *Cuddapah South* division where the profit realized was increased by Rs. 6,188; and

(*c*) the net loss in *Kurnool East* division in 1930–31 is less than in 1929–30 and it is due to a reduction in capital expenditure.

The large deficit under ' Direction ' was due to the Circle being in charge of a senior Conservator and to payment of leave allowances to a Deputy Conservator (Mr. K. R Venkataramana Ayyar) on leave.

64. The imporatant variations between the actuals of 1930–31 and those of the previous year are explained below:—

RECEIPTS.

(a) Timber and other produce removed by Government Agency.

Timber (—*Rs.* 17,732).—The decrease is mainly in *Kurnool East* and *South* divisions and it is due to—

(1) want of demand for softwood in *Kurnool South* division due to slack trade and also to advent (via Bezwada) of such wood at low rates from Nizam's Dominions; and

(2) want of demand for other timbers on account of trade depression.

Fuel (—*Rs.* 4,727).—The decrease is due to discontinuance of the manufacture of charcoal in *Kurnool West* division as the supply of charcoal to the Municipality was given up.

(b) Timber and other produce removed by consumers and purchasers.

FOREST DEPARTMENT.

Timber (—Rs. 39,980).—The decrease is in all the divisions and it is due to—

(1) owing to general depression in trade coupes did not fetch as good prices in 1930–31 as in 1929–30; and

(2) apportionment of revenue of timber coupes to fuel as the contractors of *Cuddapah South* division converted most of the timber into fuel due to dullness of timber trade and greater demand for fuel in the Madras market.

Fuel (+*Rs.* 28,817).—The increase is in *Cuddapah South* division and it is due to the additional number of coupes opened and sold as per provisions of the consolidated working plan and due to greater demand for fuel in the Madras market which induced the contractors to convert even timber into fuel as stated under ' Timber ' above.

Bamboos (—*Rs.* 4,500).—The decrease is due to market depression.

Grazing and fodder grass (—*Rs.* 21,641).—The decrease is in all the divisions except *Cuddapah North* and it is due to the fact that very few 'foreign cattle' came to graze in the forests of this Circle owing to good rains and consequent availability of grass

everywhere. Even the number of district cattle for which permits were purchased was less in 1930–31 as there was grass in unreserves.

Minor forest produce (—*Rs.* 11,544).—The decrease is mainly due to the fall in prices of tangedu and rela barks. This is still more apparent under ' Revenue Department—Minor forest produce.'

REVENUE DEPARTMENT.

Timber (—*Rs.* 16,320)—*Fuel* (—*Rs.* 3,847).—These are fluctuating items and the revenue under these heads is collected by the Revenue Department. We do not control them. The fall of revenue may be attributed to financial stringency.

Minor forest produce (—*Rs.* 1,33,926).—Please see explanation against ' Forest Department—Minor forest produce ' above.

Fines and forfeitures (+*Rs.* 832).—This is a fluctuating item. The increase is due to a heavier fines imposed on contractors for irregularities committed in coupes.

Other sources (—*Rs.* 16,984).—This is a fluctuating item and the decrease is mainly attributed to the following causes:—

(1) Due to crediting to the budget unit in 1929–30 sale-proceeds of certain forest buildings in *Kurnool West* and *Cuddapah South* divisions.

(2) Due to realization of a less amount of compounding fees than in the previous year.

(3) Due to fall in penning fees owing to the absence of foreign cattle.

EXPERIMENTS.

8-b Conservancy and works—Forest produce removed by Government Agency.

Timber (—*Rs.* 810).—The decrease is due to the stoppage of the departmental supply of softwood in *Kurnool South* division for want of demand and to leasing out of timber coupes in *Kurnool East* division instead of working them departmentally as in 1929–30.

Fuel (—*Rs.* 2,076).—The decrease is due to giving up charcoal operations in *Kurnool West* division and to not felling indicator areas in coupes of *North Cuddapah* division.

Timber and other produce removed by consumers and purchasers (—*Rs.* 1,565).—The decrease is due to—

(1) less commission paid to permit-issuing officers on account of fall in grazing revenue,

(2) reduction in rates for cutting coupe and strip lines,

(3) entertainment of more watchers on higher salary during the previous year 1929–30 in *Cuddapah South* division as against less number of watchers during the year under report, and

(4) to reduction in the rates allowed in *Cuddapah South* division for marking standards in the improvement felling coupes during the year.

Communication and buildings—Roads and bridges (+ *Rupees* 1,240).—The increase is due to special repairs done to some roads in *Kurnool East* and *Cuddapah South* divisions during the year under report for which additional allotments had to be given.

Buildings (+*Rs.* 1,363).—The increase is for repairs to buildings consequent on damage by heavy rains.

Rates and taxes (+*Rs.* 590).—The increase is due to debiting to this head Municipal taxes on buildings belonging to the Forest Department which were debited to ' Rates and taxes ' under ' Contingencies ' in the previous year.

Conservancy and Regeneration—Fire-protection (—*Rupees* 950).—The decrease is due to—

(1) savings in certain divisions by subordinates doing the work, in place of paid coolies; and

(2) debiting under ' Regeneration ' the expenditure incurred in *Cuddapah North* division on ' Cutting back ' of seedlings.

Other works (—*Rs.* 812).—The decrease is due to (1) repairs of certain tanks proving unnecessary and (2) reduced rates for ' tending ' operations in *Cuddapah North* division.

Miscellaneous—Honoraria (+*Rs.* 450).—The increase is for payment of rewards for detection of sandalwood smuggling in *Anantapur* division and illicit browsing of goats and sheep in *Kurnool East* division.

52-*A. Capital outlay on Forests—Communications and Buildings, Roads and Bridges—Works in progress* (+*Rs.* 6,468).—The increase is on the Sudem-Adutla road in *Kurnool West* division.

New works (—*Rs.* 849).—The decrease is due to debiting under ' works in progress ' a portion of the charges for construction of Sudem-Adutla road.

Buildings—Works in progress (+*Rs.* 1,200).—The increase is in *Anantapur* division and it is due to additional compensation paid for the acquisition of buildings for range quarters at Madanapalle and the sum spent for improvement to the range quarters.

New works (—*Rs.* 5,522).—The decrease is due to the postponement of several new works sanctioned for 1930–31 on account of the present financial stringency.

Other works—Works in progress (—*Rs.* 550).—The decrease is due to the savings effected in the construction of a well at Kondagorlapenta in *Cuddapah North* division, as work could not be done owing to the existence of water in the well.

New works (—*Rs.* 509).—The decrease is due to undertaking no new works in *Kurnool South* division during the year under report owing to the present financial stringency.

8-*c* (1) *District Establishments—Pay of officers* (*non-voted*) (+*Rs.* 23,782).—The increase is due to payment of leave allowance to a Deputy Conservator (Mr. K. R. Venkataramana Ayyar) on leave and to posting of two Imperial Officers in succession to Anantapur division.

Pay of officers (*voted*) (—*Rs.* 5,200).—The decrease is due to—

(1) posting of Imperial Officers during 1930–31 to *Anantapur division*;

(2) no Extra Assistant Conservator was attached to *Kurnool South* division during 1930–31; and

(3) posting of two Extra Assistant Conservators for six months and one for the remaining six months during 1929–30 in *Kurnool West* division against the posting of one Extra Assistant Conservator only for ten months during 1930–31 in the same division.

Pay of establishments (*Permanent*)—(—*Rs.* 1,814).—The decrease is due to reduction of Foresters in *Kurnool East* division and to payment of leave allowance to the Accountant of the Direction office during 1929–30.

Pay of establishment (*Temporary*) (—*Rs.* 703).—The decrease is due to—

(1) abolition of a clerk on Rs. 30 in *Kurnool East* division; and

(2) no Veranacular Training School was held and there was no peon for the Extra Assistant Conservator attached to *Kurnool West* division for some months in the year.

Travelling allowance (voted) (—*Rs.* 2,905).—The decrease is due to not opening a Vernacular Training School and to very economical touring.

Fixed Travelling Allowance (+*Rs.* 613).—The increase was in *Kurnool West* division and it is due to the fact that a number of foresters were deputed for road-work in Nallamalais for which enhanced fixed travelling allowance had to be paid.

Other Compensatory (+*Rs.* 545).—The increase is due to the fact that unlike 1929–30 every Ranger kept a pony, and to the increased conveyance allowance due to the amalgamation of Kanigiri range with *Kurnool South* division.

Charges payable to Government departments and others (+*Rs.* 1,369).—The increase is due to payment to Public Works Department of arrear rents due from the Forest Department on account of Conservators' quarters at Bellary and the quarters for the District Forest Officer of *South Cuddapah* division.

65. The outstanding revenue at the close of the year amounted to Rs. 1,92,640 of which Rs. 34,277 fell due within the year against Rs. 18,463 only in the previous year. Of Rs. 34,277 referred to above Rs. 26,914 represented tangedu lease amounts, which owing to bad trade could not be realized by the due dates. Of the overdue amount (Rs. 34,277) Rs. 22,145 had been realized since the close of the year.

66. Of the revenue realized during the year under report 41 per cent was from major produce 50 per cent from minor produce and 9 per cent from other sources.

67. Of the expenditure under 8-*b*. Conservancy and works and 52-A. Capital Outlay on Forests, 55 per cent relates to exploitation, 44 per cent to improvement and upkeep of forests and 1 per cent to Miscellaneous items.

68. The estimated value of timber and other produce in the sale depots at the close of the year was Rs. 3,479 against Rs. 2,434 at the commencement of the year.

CHAPTER VI.—RESEARCH AND EXPERIMENTS.

Research.

69. Nil.

Experiments.

70. *Anantapur.*—In Gunda reserve of Hospet range five 10-acre plots are being ploughed and sown with *Cassia auriculata* (tangedu) seed, at the rate of one plot each year from 1927–28

to 1931–32, so that in 1932 tangedu bark of known ages from one to five years will be available for tannage test. The result of sowings in the first three plots is poor: a few scattered patches, whose rate of growth appears to be very slow, have survived in each plot. In the fourth (1930–31) 10-acre plot, germination was said to be good, but the result is almost a complete failure. Rupees 19 was spent and the total cost up to date has been Rs. 55.

Cuddapah North.—The six half-acre sample plots opened during 1929–30 in Nallamalais, Palakondas and Lankamalais, to record height and girth of standards, saplings and coppice shoots were maintained. The next measurement is due in 1934.

Cuddapah South.—Sample plots opened in 1927 in each range except Sanipaya for quinquennial girth measurement of red sanders trees (50 seedlings and 50 coppice) were maintained. The next measurement is due in 1932.

Observations in the sample plots in selected improvement felling coupes on the flowering and seeding of red sanders were recorded in the registers. The Forest Research Officer, Ootacamund, has some experimental plots in this division, which he last measured in December 1929. Observations were recorded and sent to him half-yearly during 1930–31. An experiment by the District Forest Officer showed that more leaf and better quality leaf for *bidi* making is obtained by pollarding *Diospyros* (tooki) trees. No result was reached in an experiment on regenerating red sanders.

Kurnool district.—As stated in the last report all Mr. Kesava Vittal's experimental plots were abandoned except the *rab* sown plots. They were fire-protected, but an accidental fire occurred and the damaged seedlings were cut back. Periodical measurements were recorded in these plots.

The 5-acre experimental plot opened at Gundlabrahmeswaram (*Kurnool West* division) during 1929–30 was stump planted and sown with germinating seeds, followed by rigid fire-protection and weeding during the year at a cost of Rs. 119.

The Research Institute, Dehra Dun, called for specimens of *Terminalia tomentosa* varieties and the District Forest Officer, *Kurnool West*, has found two growing side by side in Guvvalakunta reserved forest. They were full grown trees, both in flower. One has dark green leaves with grey underside and the other a lighter green leaf with the underside distinctly brown. Specimens will be sent.

The yepi (*Hardwickia*) experimental plot at Chelama (*Kurnool South* division) continued to be maintained during the year.

71. *Experimental early-burning plots.*—These plots in red sanders forests in *Anantapur, Cuddapah North and Cuddapah South* designed to test the effect of early-burning under different conditions were maintained.

The four new plots opened during 1929–30 in *Cuddapah North* also continued to be maintained.

Definite conclusions have not yet been drawn.

CHAPTER VII.—ADMINISTRATION.

72. M.R.Ry. Rao Sahib K. R. Venkataramana Ayyar held charge of the Circle from 1st April to 14th April and Mr. A. A. F. Minchin during the rest of the year under report.

73. *Changes in territorial jurisdiction.*—The Kanigiri range of *Nellore* division was transferred from the First Circle and added to *Kurnool South* division with effect from 1st April 1930. On the same date a portion of Giddalore range of *Kurnool South* division (West Veligondas—part), etc., (59 square miles) was added to Kanigiri range for administrative purposes.

A portion of Gundlakamma range of *Kurnool South* division (Cumbum reserve—part) (8 square miles) was transferred to the Turimella range of *Kurnool East* division from 1st April 1930 for administrative convenience.

74. *Tours.*—The Chief Conservator visited the Circle in December 1930 and January 1931. He inspected Madinikonda and Horsleykonda reserves of Madanapalle range and Moka, Kupgal, Banavasi, Adoni East and West reserves of Hospet range of *Anantapur* forest division.

As a result of these inspections it was ordered to hand over Banavasi reserved forest to panchayat management, and Madinikonda was transferred from Class III to Class I and Adoni East and West are to be leased to the Adoni municipality for a period of 25 years from 1st July 1931.

The Conservator toured in all divisions except *Kurnool East* during the year and spent 205 days in camp.

Mr. Minchin wrote inspection notes on the forests of *Kurnool South, Anantapur* and *Cuddapah South* divisions during the year.

The Working Plans Conservator toured in *Kurnool West* and *Cuddapah South* divisions in connexion with new working plans.

All the District Forest Offices were inspected and the results were generally satisfactory.

All the District Forest officers toured for more than the prescribed minimum.

75. *Range office inspections.*—All the Range offices in the Circle were inspected by the District Forest Officers during the year.

76. *Audit.*—All the District Forest offices were inspected by Audit Officers and the results were generally satisfactory.

77. *Recruitment to the Madras Forest College.*—Nobody was deputed during the year.

78. *The Forest (Vernacular Training) School.*—There was none in 1930 for want of a sufficient number of untrained guards.

79. *Relation between Forest and Revenue officials.*—The relations were cordial. The District Forest Officer, *Kurnool East*, was not seen by his Collector from November 1930 until he went on leave on 30th June 1931, indicating a lack of personal touch which is strongly discountenanced.

80. *Health of establishment including an account of measures of sanitation and casualties.*—The health of the establishment was as usual bad in the *three Kurnool divisions* and in the Palakondas and Nallamalais of *Cuddapah North* division on account of malaria and generally satisfactory in other divisions. One forester and one forest guard in *Kurnool South*, two foresters in *Kurnool West* and one forest guard in *Anantapur* division died of malaria. No special measures of sanitation were undertaken beyond clearance of jungle and vegetation adjacent to staff quarters.

In *Kurnool West* division, one forest guard and one watcher and in *Cuddapah North*, two forest guards were murdered, in the discharge of their duty. The two accused in *Kurnool West* division were acquitted while the murderer in *Cuddapah North* division was sentenced to transportation for life.

Extraordinary family gratuities were granted to the families of the deceased subordinates in all four cases.

CHAPTER VIII—GENERAL.

(i) Formation and Management of Panchayats.

81. There were changes in the area of ryots' forests in all divisions except *Kurnool West* and *Cuddapah South*. In *Anantapur*, there was an increase of 3 square miles due to adopting resettlement figures for some reserves in Kudligi taluk of Bellary revenue district of *Anantapur* forest division.

In *Kurnool East*, there was a decrease of 38 square miles due to the resumption by the Forest Department of eight Eastern Nallamalai blocks.

In *Kurnool South*, there was an increase of 38 square miles due to the transfer of Kanigiri range of *Nellore* division from the First Circle.

In *Cuddapah North*, Chennupalle reserved forest which was classified as Ryots' forests continues to be under the management of the Forest Department as there is no likelihood of a panchayat being formed.

Thus at the end of the year the total area of ryots' forests was 1,445 against 1,448 at the beginning of the year.

The Adoni East and West reserves of *Anantapur* division referred to in the last year's report continued to be managed by the Adoni Municipality. Orders have since been passed by Government to lease out these reserves to the municipality for a period of 25 years from 1st July 1931.

(ii) Measures for improving local supplies and facilities.

82. The wants of the people in the matter of small timber, fuel and bamboos were met in all the divisions by providing timber, fuel and bamboo coupes.

As usual, the public were kept informed by notifications in the Forest Sheets of the District Gazettes of the various descriptions of forest produce available for sale and the rates at which they would be sold at the edge of coupes. Permits were, as usual, issued for removal of green manure leaves.

In *Kurnool East* and *Cuddapah South* divisions, additional felling series (6 in *Kurnool East* and 4 in *Cuddapah South*) were opened during the year.

In *Kurnool South*, the demand for large timber was met by working departmentally the Isukagundam Timber Coupe I of Gundlakamma range. The produce was carted to Diguvametta sale depot and almost the whole quantity was sold except spokes and felloes and some logs. The demand was not very keen. To meet the demand for agricultural implements some wind-fallen trees in the Chelama range and some bandi nogalu (cart-poles) were sold during the year.

In *Kurnool West* palmyra trees were sold as usual. Yepi fibre extraction in Yerramalais continued to provide occupation to the Boyas.

The supply of fuel to Kurnool town and Nandyal town during the year was larger than last year and fuel was sold cheaper, there being competition for a short time with fuel brought from the Nizam's State by rail.

In *Cuddapah North*, two coupes were secured in public auction by the depressed class people of Mipireddipalle and Regalakunta villages in Vonipenta and Badvel ranges respectively through their co-operative societies.

In *Cuddapah South*, in addition to the new timber and fuel felling series, departmental extraction of red sanders, *Terminalia tomentosa*, *Shorea tumbuggaia* and miscellaneous posts, *Shorea talura* felloes and ' Dollwood ' was undertaken from the selected areas in four ranges (Kodur, Rajampet, Balapalle and Sanipaya) and sold locally in periodical public auctions.

The demand for timber, fuel, etc., in Cuddapah town was met by fellings in the Palakondas of Cuddapah range, Vontimitta and Siddhout ranges of *North Cuddapah* and Ganganapalle range of *Anantapur* division.

(iii) Water-supply.

83. In *Anantapur*, Nagappakunta in Amagondapalayam reserve was repaired at a cost of Rs. 38.

In *Kurnool East*, a sum of Rs. 73 was spent on improving the water-supply in the grazing grounds (Ayyanappakunta in Markapur range Rs. 60 and a spring at Arichelima in Dornal range Rs. 13). The well at Chinnamantrala was bored to a depth of 98 feet 6 inches by boring 40 feet 7½ inches and a good supply of water for the Chenchus and their cattle is now ensured.

In *Kurnool South*, the question of laying the pipe line for the supply of water to pilgrims during the festival at Ahobilam by the Mutt authorities is still pending.

In *Kurnool West*, the spring of the *Koneru* at Bairluty was cleared at a cost of Rs. 13. One pool in Gundlakamma river was cleaned out, at a cost of Rs. 15.

In *Cuddapah North*, a stone trough was installed at Chinnaletipati bhavi and connected with the tube well close by for supply of water to cattle at a cost of Rs. 27.

A draw well was constructed at Kondagorlapenta for the use of coupe contractors, graziers and touring officers at a cost of Rs. 409.

(iv) Timber and Sandalwood Transit Rules.

84. Rules are in force in *Cuddapah*, *Kurnool* and the portions of *Anantapur* division which are included in *Cuddapah* and *Chittoor* districts and are reported to have worked satisfactorily. Amendments to rule 7 of the Timber Transit Rules of *Kurnool* and *Cuddapah* to make the registration of property mark obligatory were sanctioned by Government.

The proposals for the introduction of Sandalwood Transit Rules referred to in the last year's report were not sanctioned by the Government pending a general revision of the Sandalwood Transit Rules now in force in many districts of the Presidency.

(v) Jungle Tribes.

85. *Cuddapah.*—Some Yenadis continue to reside in the Vontimitta range of *Cuddapah North* division. They are not troublesome people. In *Cuddapah South* some of them are employed as forest guards and watchers for which they are well suited.

86. *Chenchus.*—(i) The report of Mr. A. V. Sundaram, Extra Assistant Conservator of Forests, on regularizing all the departures made, from time to time, from the rights admitted in favour of the Chenchus at the time of the forest settlement is under correspondence.

There was no change in the Chenchu administration, which continued under the Collector of Kurnool as Special Chenchu Officer. The cost was Rs. 28,635 as against Rs. 26,922 last year.

(ii) *Monthly earning of the Chenchus on works directly connected with forests.*—Chenchu labour was used in all departmental work and by contractors wherever Chenchus were available. The works were timber and bamboo fellings, minor forest produce collection, regeneration operations, and to some extent roads and petty works where skilled labour was not of great importance. The contractors who engaged Chenchu labour paid the Chenchus partly in kind at the local market rate and partly in cash. Besides the above the Chenchus supplemented their earnings by watching the crops of ryots, and as graziers of ryots' cattle. Some are employed as headmen and deputy headmen of gudems, as forest guards, forest watchers, Chenchu school teachers and metta talaiyaris on the ghaut roads.

(iii) *Chenchu crimes.*—The number of cases filed in the Court of the Assistant Chenchu Officer (Ranger V. T. Staggs) during the year was 18 in which 62 persons were concerned as against 21 cases in which 67 persons were concerned during the previous year. Thirteen of these cases relate to offences against the Madras Forest Act, one case of misconduct in public by a drunken person under section 510, Indian Penal Code, one case of hurt under section 324, Indian Penal Code, one case of theft under section 379, Indian Penal Code, one case of enticing a married woman under section 498, Indian Penal Code, and one case of hurt under section 332, Indian Penal Code.

The headmen and deputy headmen appointed under G.O. No. 390, dated 20th March 1926, for nine gudems (seven in the West division, one in the East and one in the South) discharged their duties well and usefully. During the year headmen and deputy headmen were appointed under G.O. No. 656, dated 22nd March 1930, to five more gudems in the Kurnool East division, viz., Peddamantrala, Tummalabailu, Chintala and Peddachama in the Kurnool East forest division and Pangidi in the West division. Their duties are—

(1) to prevent crimes in the gudems;

(2) to see that the Chenchu boys and girls attend school regularly;

(3) to assist the Assistant Chenchu Officer and the forest rangers in all ways for the improvement of the Chenchus;

(4) to report promptly the appearance of any criminal gang to the nearest Forest or Police Officer; and

(5) to report the names of absentees and of new Chenchus who came to the gudems; also births and deaths. They are very useful in providing coolies for forest works.

Crime was not bad. Chenchus tend now to live more peaceful and settled lives.

(iv) *Works controlled by the Special Chenchu Officer.*—The total expenditure on Chenchu establishment and works (agriculture, education, industrial schools and medical relief), controlled by the Special Chenchu Officer was Rs. 28,624-13-0 as follows:—

	1930-31.			1929-30.		
	RS.	A.	P.	RS.	A.	P.
8. c.v. Pay of establishment—Temporary	16,529	10	0	15,325	13	0
Allowances — Voted — Travelling allowances	2,245	15	0	2,503	13	0
Fixed Travelling allowance	298	12	0	287	8	0
Other compensatory	180	0	0	195	0	0
Rents	26	5	0	...		
Miscellaneous	1,356	14	0	926	7	0
Scholarships and stipends	726	15	0	457	6	0
Apparatus and materials	487	7	0	763	3	0
Clothing and equipment	695	13	0	730	0	0
Books and periodicals	221	11	0	199	0	0
Supplies and services—Miscellaneous.	4,776	11	0	5,081	8	0
Maintenance, repairs and renewals—Buildings	596	13	0	451	14	0
52-A. Capital—Other works—New works—Boring of wells for the benefit of Chenchus	485	15	0	...		
Total ...	28,624	15	0	26,921	8	0

(v) *Agriculture.*—Outstanding loans were Rs. 2,141 at the close of last year. Some groups of Chenchus of the West and East Forest divisions were advanced during the year Rs. 360 and Rs. 1,460, respectively. The recoveries during the year were Rs. 486, leaving an outstanding sum of Rs. 3,475 at the end of the year.

The Chenchus of Indreswaram and Nagaluti in the Kurnool West division and those of Peddachama, Chilakacherla, Tummalabailu, Garapenta, Chennapalem, Chintala and Peddamantrala in the East division showed some desire to cultivate. A good crop was reaped in the West division while in the East division the crops failed owing to irregular rains. The crops raised were *sajja, korra, variga, olavalu,* cholam, arica and paddy.

Generally the Chenchus are still far from being interested in agriculture. Lands, if required, are assigned to them on annually renewable leases.

Out of 387·34 acres of land in the Kurnool East Forest division and 44 acres of land in the Kurnool West division assigned free of assessment for cultivation, only half was cultivated. The lesson of the Lambadis (Sugalis) who cultivate lands in the reserved forests on payment of assessment has not yet been learned by the Chenchus. Their cattle form the wealth of the Chenchus who exercised their right to graze their own cattle free.

(vi) *Industries.*—There were three industrial schools at the beginning of the year where carpentry, tape-weaving, making winnows and fans were taught. The District Educational Officer reported of the Chenchu school at Chilakacherla that the vocational branch was more a workshop attached to the school than a training class in handicraft and that this was unlikely to benefit the pupils and so long as a return in money was expected the system would not work well. The Director of Public Instruction prohibited handicraft training in schools which had no class above the fourth standard.

The teachers felt that most of their time must be devoted to the production of finished articles failing which they would incur disfavour. This left them insufficient time to teach the boys to do things themselves. Thus only the rougher preliminary operations were left to the boys in carpentry and the teachers did all the more advanced work partly for fear that the boys might spoil a good piece of wood and partly because they could not wait till the boys laboriously finished a certain task. The Forest Department did their best to help by supplying planks and scantlings instead of rough timber. The finished articles, viz., toys, cartwheels, winnows, etc., were defective and had little sale value.

For want of a sufficient number of boys between the ages of 12 to 14 who alone could follow with advantage the courses in carpentry and basket-making, the industrial schools were closed during the year. The expenditure on industrial schools during 1930–31 was Rs. 305–2–6 as against Rs. 1,326 of the previous year.

(vii) *Education.*—There were twenty Chenchu schools working at the beginning of this year. One school at Regattikunta in the East division was abolished in May 1930 as the Chenchus there showed signs of migration to other gudems. A new school was opened at Chennupalem in its place in June 1930.

The schools are controlled by the Special Chenchu Officer and are supervised by the Assistant Chenchu Officer and by the Supervisor of Chenchu schools. The Deputy Inspectors of Nandyal, Atmakur and Markapur visited the schools during the year and submitted reports.

The Supervisor of Chenchu schools visited all the schools once in three months and toured on an average for twenty days in a month. Visits were paid by the Collector, District Forest Officers, and District Educational Officer.

There is a teacher for each school but in two schools, viz., Pecheruvu (Boys) and Nagaluti, one additional teacher for each was appointed as the numbers had increased. Proposals for additional teachers required at Pecheruvu (Girls), Bairluti and Indreswaram in the West division and Chilakacherla, in the East division have been kept in abeyance for the present.

Out of 22 teachers employed, seventeen are trained and the rest untrained. The latter were given notice to undergo training during 1931–32 on pain of their services being dispensed with. Trained teachers draw a salary of Rs. 20—1—30 while untrained teachers draw Rs. 15 per month. In addition the teachers draw a hill allowance of Rs. 5 per mensem except those of Chenchu race who are domiciled in the Nallamalais.

Seven teachers are Muhammadans, six Non-Brahmans, four Christians, three Chenchus, one Sugali and one Indian Christian mistress for the Pecheruvu Girls' school.

The number of pupils on the rolls at the beginning of the year was 352 boys and 210 girls while at the close of the year it was 328 boys and 200 girls.

The average number per school was 17 boys and 10 girls as against 17 boys and 11 girls last year. The average daily attendance was 13 boys and 8 girls as against 12 boys and 8 girls last year.

The pupils were taught up to the fourth standard under the revised syllabus prescribed last year.

(viii) *Chenchu scholarships.*—There were three boys studying last year in the Atmakur Board High School with the aid of Government scholarships at Rs. 175 per pupil per annum. Two more boys were admitted during the year from Nagaluti Chenchu School. They were all promoted, and out of five boys one was in the third form, two in the fifth standard and two in the fourth standard.

The boy in the III Form secured a silver medal for throwing the cricket ball at the District Schools Atheletic sports (Pentland Sports for District High Schools) at Kurnool.

A midday meal costing one anna was supplied daily to all pupils to stimulate attendance at school. A sum of Rs. 3,566 was spent on this. It is considered that the feeding and the clothing of these children is a potent factor in keeping the adults settled each in his own gudem and gives us a hold over them, besides the good which it does to the rising generation.

In Pecheruvu girls' school, the mistress interested herself in teaching needle-work—a good feature. Rupees 5 was spent on cloth, needles and thread.

The schools are very close to the Chenchu gudems. There are thatched buildings for the school and the teacher separately. At Pecheruvu and Bairluti there are *pakka* built schools. There are kitchen sheds. A new school and teachers' shed were built at Chennapalem during the year. The cost of repairs to schools and teachers' sheds, etc., during 1930–31 was Rs. 597 against Rs. 452 last year. All the buildings were kept in proper repair.

The health of pupils and teachers suffered as usual from malaria and enlarged spleen. Several teachers were obliged to go on leave which dislocated work, as it is difficult to get suitable substitutes for short periods of leave without loss of time.

Expenditure on Chenchu schools was as follows :—

	1930–31	1929–30
	RS. A. P.	RS. A. P.
Teachers' salaries	6,905 14 0	6,732 0 0
Supervisor's pay	687 0 0	1,060 14 0
Pay of Supervisor's peon ...	180 0 0	156 0 0
Repairs to school sheds ...	596 13 0	451 14 0
Purchase of furniture ...	277 0 0	79 7 0
Purchase of books	221 11 0	203 0 0
Cleaning charges	115 12 0	214 1 4
Feeding charges	3,566 8 3	3,541 8 0

	RS. A. P.	RS. A. P.
Travelling allowance of Supervisor's peon	79 10 0	91 11 0
Travelling allowance of Supervisor	3 8 0	...
Travelling allowance of teachers on transfer	69 12 0	72 13 0
Clothing and equipment ...	695 13 0	730 0 0
Scholarships and stipends ...	726 15 0	457 6 0
Industries	305 2 6	1,326 0 0
	14,631 6 9	15,116 10 4

(ix) *Medical aid.*—As usual, the Sub-Assistant Surgeon on Chenchu duty visited the gudems on regular tours. Health of the Chenchus was generally satisfactory. Smallpox and cholera were prevalent in some gudems for short periods, and the Sub-Assistant Surgeon gave aid. The Chenchu has taken readily to Salvarsan injections and the local officers believe that markedly good results have followed. This is very important. The expenditure on medicines was Rs. 487. The headquarters of the Sub-Assistant Surgeon was moved from Dornal to Atmakur during the year. The total expenditure for medical relief was Rs. 2,415.

(x) *Miscellaneous works.*—Boring for wells for the benefit of Chenchus was done in Chinnamantrala at a cost of Rs. 405 in Kurnool East division and wells were deepened at Yathambhavi and Nimmathotachelama of Ganjivaripalle range and Chilakacherla well of Dornal range in the East division at a cost of Rs. 30, Rs. 20 and Rs. 31, respectively.

Mining and Quarrying.

87. *Anantapur.*—No fresh mining licences were granted during the year.

Several prospecting licences were granted for barytes (barium sulphate) in Ganganapalle range and there was activity in staking out claims. The barytes is railed to Calcutta.

Kurnool West.—Two slab quarries were leased out as usual for a term of five years up to 31st March 1935.

Cuddapah South.—One manganese plot in Balapalle range was leased out by the Revenue Department but the contractor did not start work during the year.

LIVESTOCK.

88. (*a*) *Elephants.*—The two baggage elephants continued in *Kurnool West* division, their health gave anxiety.

(*b*) *Buffaloes.*—The two buffaloes at Horsleykonda, for carrying water to the forest camp and garden continued.

VETERINARY ESTABLISHMENTS.

89. Nil.

SUITS.

90. Nil.

CONTROL OF UNRESERVED LANDS BY THE FOREST DEPARTMENT.

91. Three hundred and forty-six acres of assessed waste in Garga village adjoining Bandri reserve in Hospet range in *Anantapur* continued under Forest management for the sake of the sandalwood in it.

In *Kurnool East* division the Amaroy (minor forest produce) in unreserves in fourteen villages of Cumbum and Markapur taluks was leased along with the reserved forests for the year ended 31st August 1931. The aim was to avoid friction.

The forest rules for unreserved lands in the Kurnool district and for the revenue realized by the Revenue Department were revised and published in the District Gazette for February 1931.

92. *Cultivation in reserved forests—Kurnool East.*—No fresh assignments of lands for cultivation in reserved forests were made in the year. The Sugalis continued to cultivate on payment of assessment.

93. *General—Miscellaneous.*—One man-eater (tigress) was shot in Turimella range, for which the shikari got the notified reward of Rs. 150.

ENCLOSURE.

A BRIEF ACCOUNT OF FOREST OPERATIONS AND THEIR RESULTS IN THE SEVERAL DIVISIONS OF THE SECOND CIRCLE, BELLARY, DURING 1930–31.

ANANTAPUR.

Description and area.—The Anantapur Forest division comprises 1,791 square miles of reserved forest, of which 576 square miles are class I reserves under the management of the Forest Department and 1,215 square miles are class III reserves under panchayat management.

The former includes the Adoni East and West blocks with an area of 5·46 square miles, which is managed by the Adoni municipality under the general control of the District Forest Officer. Orders have since been passed by Government to lease out this area to the municipality for a period of 25 years from 1st July 1931. In addition to the above, 346·44 acres of unreserved land in Garga village limits of Hospet range is under the control of the Forest Department as it contains a large quantity of sandal. The division includes the whole of Anantapur and Bellary, and parts of Cuddapah and Chittoor districts. The forests of the division include five separate groups of hills:—

(1) and (2) The Kadiri and Madanapalle groups which together form the Madanapalle forest range;

(3) the Bukkapatnam group which comprises the forest range of that name;

(4) western tongue of the Palakondas comprising the Vempalle and Ganganapalle forest ranges; and

(5) the Hospet group forming part of Hospet range.

In addition there are a few isolated hills and about 25 square miles of forest in the plains, chiefly on the upland plateau of Hospet at 2,000 feet elevation.

The forest growth is mostly rather poor, as the tract is arid. The Ganganapalle and Vempalle ranges contain red sanders forest of poor quality. The Amagondapaliem and Kothakota reserves of Bukkapatnam range contain fair patches of *Hardwickia binata*, *Anogeissus*, and *Chloroxylon swietenia;* very little large timber is obtainable in the division.

2. *Subordinate executive and protective charges.*—There are five ranges and 57 beats in the division with eleven foresters. Each beat is in charge of one forest guard and one watcher:—

Bukkapatnam	12	beats.
Madanapalle	17	,,
Hospet	9	,,
Ganganapalle	8	,,
Vempalle	11	,,
	57	

3. *Cost of administration.*—The establishment charges during the year were as follows:—

	RS.
District Forest Officer	11,909
Range Officers	7,169
Subordinate staff	16,969
Clerical establishments	8,790
Total ...	44,837

In addition, the temporary establishment—Forest watchers, bungalow watchers and menial staff—cost Rs. 7,747.

4. *Cost under other important heads.*—Rupees 2,206-1-0 was spent on the new Range office and quarters at Madanapalle. Of this amount, Rs. 1,698-8-0 was additional compensation awarded by the Court, and Rs. 507-9-0 was spent on capital repairs.

There was no expenditure on developing the division. Small sums were spent on necessary repairs to roads and buildings.

The maintenance of reserve boundaries, the eradication of lantana at Horsleykonda the creation of propagation centres for sandal, and some *rab* sowings in worked fuel coupes was carried out free of cost by the staff.

5. *Income from main sources.*—The unreserves provide 74 per cent of the total revenue of Anantapur division. Tangedu bark is the chief source of revenue. The revenue obtained from timber and fuel is thrice as much from the unreserves as from the reserves. Minor Forest produce, grazing and compounding fees are the other chief sources of income. The introduction of sandalwood is expected to increase largely the value of some of the forests.

Details of revenue are given below:—

	RS.	
Sandalwood	661	Reserves.
Timber	1,285	Do.
	16,204	Unreserves.
Firewood and charcoal ...	5,073	Reserves.
	4,877	Unreserves.
Bamboos	425	Reserves.
Grazing	23,829	Do.
Minor produce	7,393	Do.
	1,43,426	Unreserves.
Miscellaneous	18,989	Reserves and Unreserves.
Total ...	2,22,162	
Deduct refunds ...	106	
Net ...	2,22,056	

6. *Chief works in the division.*—The management aims at the creation of a valuable sandalwood estate in course of time, and at improving the stocking and quality of the natural forests, by protective measures and by sylvicultural operations. The chief works are therefore protection, grazing control, the creation of sandal propagation centres, and the improvement of the growing stock by felling—coppicing or cutting back—supplemented by *rab* sowings.

7. The financial results are analysed below after apportioning the 'Direction' receipts and charges.

	RS.
Revenue	2,22,067
Expenditure	83,153
Net profit ...	1,38,914

KURNOOL EAST.

Description and area.—The area of the reserves under the control of the Forest Department is 945 square miles the increase over the year 1929–30, being due to resuming the Nallamalais extension blocks which were under panchayat management till the end of June 1930. An area of 33 square miles is under panchayat management. The outer slopes are practically devoid of good tree growth except for some scattered, stunted and gnarled yepi (*Hardwickia binata*) trees. A large part of the interior of the hills, which support an irregular, mixed, open, deciduous forest of varying density, is economically unworkable except for minor forest produce and bamboos. The most important species composing the crop in the workable interior valleys are *Terminalia tomentosa, Pterocarpus marsupium* and an occasional teak and rosewood. This type of forest is confined to localities with an average annual rainfall of about 40 inches, the rainfall elsewhere in the less wooded portions being only about 20 to 25 inches. Bamboos occur throughout the Zone of 40 inches rainfall.

2. *Subordinate, executive and protective charges.*—The division is divided into 5 ranges and 37 protective beats, with 12 Foresters. The names of the ranges and the number of beats in each are shown below:—

Name of range.	Number of beats.
1. Dornal	9
2. Ganjivaripalle	5
3. Markapur	7
4. Turimella	10
5. Yerragondapalem	6

An additional staff of three Forest Guards and three watchers has since been sanctioned to form a new beat, in each of the Dornal, Markapur and Erragondapalem ranges, for the panchayat forests which have been resumed.

3. *Cost of administration.*—The total expenditure under ' 8-*b*. Conservancy and works,' ' 52-A. Capital outlay on Forests ' and ' C. Establishments ' during 1930–31 was Rs. 68,033 of which Rs. 52,176 was on the establishment, being 77·79 per cent of the total expenditure. The charges noted here do not include the expenditure in connexion with the Chenchus during 1930–31.

4. *Cost under other important heads.*—Departmental timber and bamboo fellings were undertaken to provide work for the Chenchus at a cost of Rs. 1,310.

The maintenance of roads and buildings, *rab* sowings and other miscellaneous and petty items of expenditure cost Rs. 11,516. This sum includes the pay of reserve watchers to the extent of about Rs. 4,300.

On the construction of new buildings and wells a sum of Rs. 2,071 was spent during the year.

5. *Income from main sources.*—The main sources and the percentage they form of the gross receipts of 1930–31 are noted below:—

	RS.		PER CENT.
1. Grazing and fodder grass	29,337		55
2. Other minor produce ...	4,734 5,294	Reserves. Unreserves	... 19
3. Miscellaneous	5,380	(Reserves and unreserves)	... 10
4. Timber and fuel ...	4,581 646	Reserves. Unreserves	... 10
5. Bamboos	3,445	Reserves	... 6
Total ...	53,417		100
Deduct Refunds ...	15		
Net ...	53,402		

6. *The chief work done in the forest division.*—The chief work was to provide the Chenchus, who are scattered all over the division in 23 gudems with an aggregate population of 1,866 persons (510 adult men and 502 adult women and 854 children) with congenial occupation such as felling of timber and bamboos, and collection of minor forest produce. By degrees departmental felling is being replaced by the system of sale of standing growth. Dead wood and wind falls were collected in two localities, departmentally for the local market.

Regeneration is an important work which is carried out in felled timber and fuel coupes. The Chenchu schools were kept up, medical aid was given by the Sub-Assistant Surgeon employed for the purpose whose headquarters is at Atmakur: loans were given to the Chenchus for plough bulls and land on annual lease.

The industrial school at Chillakacherla where carpentry and basket making were taught was closed during the year as there are not enough boys of suitable age who can receive such handicraft training usefully.

7. The financial results of the division after apportioning the 'Direction' receipts and charges are given below:—

	RS.
Revenue	53,415
Expenditure	77,496
Deficit	— 24,081

KURNOOL SOUTH.

Description and area.—The area of reserves under departmental control is 665 square miles of which the Nallamalais and its foot hills cover about 532 square miles and the Veligondas 133 square miles. This includes Kanigiri range transferred from Nellore division during this year. The area under panchayat management is 57 square miles.

The dry forest is of the mixed deciduous type. The principal species are teak, *Terminalia tomentosa*, *Pterocarpus marsupium*, *Dalbergia latifolia*, *Anogeissus latifolia* and *Hardwickia binata*.

Most of the accessible portions have been heavily cut over in the past. The foot hills for the most part consist at present of trees fit only for fuel and small timber, for which they are being worked. There are some small interior valleys which contain a better type of forest where timber trees of comparatively large size are found. Elsewhere on the outer slopes Pole forests lend themselves to remunerative working.

Bamboos are found almost throughout the forest and they form one of the chief sources of revenue.

2. *Subordinate, executive and protective staff.*—The division consists of five ranges with 41 beats and 18 Foresters.

3. *Cost of administration.*—The cost of administration (establishment charges including contingencies) was Rs. 66,967 forming 80 per cent of the total expenditure.

4. *Cost under important heads.*—The total expenditure under ' 8-*b*. Conservancy and works ' and ' 52-A. Capital ' was Rs. 17,609 of which Rs. 880 was spent for roads and Rs. 3,167 for buildings and wells. Of the remaining expenditure, Rs. 5,115 represents the cost of departmental timber operations and Rs. 697 spent on regeneration, fire protection, etc., a sum of Rs. 7,308 was spent under ' timber and other produce removed from the forests by consumers and purchasers.'

5. *Income from main sources.*—Bamboos contributed 33 per cent of the gross receipts of the year. Timber and fuel came next with 30 per cent while grazing produced 17 per cent. Miscellaneous items yielded 12 per cent and minor forest produce 8 per cent.

Details of revenue realized are given below:—

	Rs.	
Timber	25,439	Reserves.
	957	Unreserves.
Fuel	7,914	Reserves.
	1,105	Unreserves.
Bamboos	38,177	Reserves.
Grazing	19,699	Do.
Minor produce	3,149	Do.
	4,783	Unreserves.
Miscellaneous	16,139	Reserves and unreserves.
Total ...	1,17,362	
Deduct Refunds ...	362	
	1,17,000	

6. *Chief works in the division.*—These are the departmental extraction of big timber, and the felling by lessees (Coupe contractors) of timber-cum-fuel, fuel and bamboo coupes.

During the year a quantity of 34,000 cubic feet of comparatively big timber was extracted departmentally for sale while a quantity of 133,000 cubic feet of small timber was extracted by lessees, who also extracted 203,000 cubic feet of fuel.

7. Financial results after apportioning the ' Direction ' Receipts and Charges are as noted below:—

	Rs.
Revenue	1,17,012
Expenditure	94,038
Net profit ...	22,974

Kurnool West.

Description and area.—The area of reserves under departmental control in the division is 854 square miles of which the Yerramalais form 300 square miles and the rest of the area is included in the western portion of the Nallamalais including their foothills. The area under panchayat management is 90 square miles.

The Yerramalais support an inferior type of very open deciduous mixed Forest in which yepi (*Hardwickia binata*) predominates in most parts, sometimes occupying pure patches while teak, Anogeissus and *Terminalia tomentosa* affect special localities. Nearly everywhere the trees are stunted and malformed and nowhere are they fit for timber. Even yepi is only fit for fuel at present as it was very badly hacked in the past. Hardly a single yepi tree in the Yerramalais escaped pollarding in the past. Rainfall in this region is scanty and the soil of little depth.

The Nallamalais have better soil, more rain and better forest. Even here, areas fit for growing big timber are confined to special localities such as some of the inner valleys and plateaux where timber felling does not pay as yet. The terai however contains areas where profitable working of small timber and fuel is possible. It is here that the bulk of the Chenchus are established and through their agency the departmental works are carried out. Bamboos are abundant throughout the Nallamalais, and they produce a steady revenue.

2. *Subordinate, executive and protective charges.*—There are seven ranges, two in the Yerramalais and five in the Nallamalais with 38 protective units (beats) in all with 21 foresters: the names of ranges and the number beats in each are as below:—

Name of range.	Number of beats.
Kurnool	9
Dhone	7
Nandyal	4
Gundlabrahmeswaram	5
Bairluty	5
Sivapuram	6
Pecheruvu	2
	38

3. *Cost of administration.*—The cost of establishment including contingencies has been Rs. 82,578.

4. *Cost under other important heads.*—The system of leasing timber, fuel and bamboo coupes to contractors, who use Chenchu labour was continued.

On the annual maintenance of roads, buildings and other works an aggregate expenditure of Rs. 2,600 was incurred while sowing and planting, fire-protection and maintenance of boundaries cost Rs. 2,488. The upkeep of two baggage elephants cost Rs. 2,134. New roads, buildings and wells cost Rs. 7,250 out of which Rs. 7,078 was spent for completing the Sudem-Adutla road which was begun in the previous year.

5. *Income from main sources.*—Small timber and fuel gave 20 per cent of the gross revenue, minor forest produce gave 34 per cent grazing 24 per cent and bamboo 10 per cent.

Details of revenue under each head are given below:—

	RS.	
Timber	10,346	(Rs. 3,569 from unreserve).
Fuel	16,660	(Rs. 2,677 from unreserve).
Bamboos	15,460	
Minor forest produce	50,553	(Rs. 33,045 from unreserves).
Grazing	34,598	
Miscellaneous ...	17,473	(Reserves and unreserves).
	1,45,090	
Deduct Refunds ...	65	
	1,45,025	

6. *Chief works done in the division.*—The chief works during the year were—

(1) Timber and fuel felling, and bamboo and minor produce collection, through the agency of lessees.
(2) The Chenchu schools and Chenchu administration.
(3) Maintenance of roads and buildings.
(4) Regeneration by *rab* sowings on a large scale.
(5) Completion of the new road from Adutla to Sudem.
(6) Fire-protection by early burning.

Revision of working plans.—For the Nallamalai and Yerramalais were completed during the year and they are pending sanction by the Chief Conservator.

7. The net financial result is seen below after apportioning the 'Direction' Receipts and Charges:—

	RS.
Revenue	1,45,039
Expenditure	1,19,647
Net profit ...	25,392

CUDDAPAH NORTH.

1. *Description and area.*—The Forest division is 790 square miles in area of which 32 square miles are under panchayat management. It includes the whole of the Lankamalais, portions of the Palakondas and the Veligondas and the southern extremity of the Nallamalais.

Two distinct types of forests are met with, viz., 'Terai' or fuel forests (scrub jungle type) and the hill or timber forests. These are deciduous, irregular in character and vary considerably in their density and condition according to soil. The chief species met with in the hill forests are

(1) *Pterocarpus santalinus* (red sanders),

(2) *Anogeissus latifolia*, and

(3) *Pterocarpus marsupium* (yegi). The first named is the typical tree of the district.

The inner slopes and plateaux contain inferior pole forests in which red sanders predominate in the south growing along with *Pterocarpus marsupium*, *Anogeissus latifolia* and *Terminalia tomentosa*. But northwards the red sanders gradually disappears giving place to the yegi.

Hardwickia binata and *Acacia Sundra* occur in pure patches, but neither grows to a large size.

The forest on the foothills or terai and on the outer slopes are typically of thorny species only fit for fuel. The tree growth met with in these areas is very open and stunted.

Bamboos, tooki leaves (*Diospyros*) plate leaves and rela bark, gum, honey, wax, etc., are available in limited quantities.

2. *Subordinate, executive and protective charges.*—The Forest division is divided into five ranges with 46 beats (each in charge of a forest guard and a forest watcher) with 13 Foresters.

Names of range.	Number of beats.
Sidhout	6
Badvel	8
Porumamilla	10
Vonipenta	12
Vontimitta	10
	46

3. *Cost of administration*—including contingencies was Rs. 52,908.

	RS.
District Forest Officer	10,267
Rangers	8,486
Subordinate staff	17,643
Clerical staff	9,432
Total ...	45,828

4. *Cost under other important heads.*—The total expenditure during the year on ' Ordinary ' and ' Capital ' works debitable to ' 8-b. Conservancy and works ' and ' 52-A. Capital outlay ' was Rs. 18,035.

Timber, fuel and other forest produce was sold standing to lessees and there was no expenditure on departmental exploitation.

The following are the Capital works undertaken:—

	Rs.
Construction of range quarters at Vontimitta ...	2,610
Tiling Chinnaletipatibhavi rest-house	320
Construction of bridle-path from Jothi to Chinnaletipatibhavi and formation of a road to connect with South Cuddapah limits in Palakondas	1,344
Fencing the bore well at Chinnaletipatibhavi ...	38

All other works were of a recurring nature such as maintenance of roads and buildings, cultural operations, fire-protection, etc.

5. *Income from main sources.*—Small timber and fuel contributed together 33 per cent of gross revenue; grazing 38 per cent.

Details of revenue under different items are given below:—

Timber	3,051	from reserves.
	147	,, unreserves.
Fuel	20,079	,, reserves.
	659	,, unreserves.
Bamboos	5,945	
Grazing	27,689	
Minor Forest Produce.	3,953	from reserves.
	4,040	,, unreserves.
Miscellaneous including confiscations ...	7,589	Reserves and unreserves.
	73,152	
Deduct—Refunds ...	195	
Net ...	72,957	

6. *Chief works done in the division.*—The extraction of both major and minor produce was carried out as usual through the agency of contractors.

During the year 31,587 cubic feet of small timber and about 17,150 tons of fuel (exclusive of yield from unreserves) were extracted by them. All bamboo blocks were also leased out.

Grazing and penning were allowed as usual on permits issued at fixed rates. Propagation of sandalwood in fenced plots in each beat continued.

7. The net financial results are seen below, after apportioning the 'Direction' Receipts and Charges:—

	Rs.
Revenue	72,966
Expenditure	80,404
Deficit ...	7,438

CUDDAPAH SOUTH.

Description and area.—The forests are mostly deciduous and irregular but ever-green scrub is also found here and there, notably along stream banks. The forests mainly lie in the following hill ranges:—

(1) The Seshachellams.

(2) Part of the Palakondas.

(3) Part of the Veligondas.

The Veligondas bear a very small proportion of poor red sanders. Important timber species are firstly red sanders, and then *Anogeissus latifolia, Hardwickia binata,* three *Terminalias* (*Terminalia tomentosa, Terminalia chebula, Terminalia belerica*) *and Pterocarpus marsupium.* These species grow in both the Palkondas and Seshachellams. The Seshachellams forests can be divided into two types:—

(1) Plain or fuel forests.

(2) Hill forests—Red sanders zone up 2,000 feet—elevation.

The plain or fuel forests contain miscellaneous fuel species with a small proportion of stunted and deformed timber species. The hills contain the more important timber forests, including the inner slopes and high plateaux up to an elevation of 2,000 feet. The species above 2,000 feet are *Shorea tumbuggaia* and *Shorea talura* with *Eugenia alternifolia, Gardenia, Buchanania,* wild date and *Cycads.*

The total area of the division is 440,978 acres or 689 square miles of which 18 square miles are under panchayat management.

2. *Subordinate, executive and protective charge.*—There are six ranges with 52 beats (one forest guard and one watcher for each beat) and eighteen foresters.

Range.	Number of beats.
Cuddapah	8
Rajampet	10
Kodur	8
Balapalle	9
Chitvel	8
Sanipaya	9
	52

3. *Cost of administration*—for the year 1930–31 was Rs. 62,425 including contingencies of which establishment charges alone were as noted below:—

	RS.
(*a*) District Forest Officer	10,309
(*b*) Rangers	11,450
(*c*) Subordinate staff	28,037
(*d*) Clerical staff	10,453
	60,249

Note.—In the amount shown against the subordinate staff (*c*) the sum of Rs. 9,755 being the pay of forest watchers and tanadars was debited to 8 (*b*) conservancy and works.

4. *Cost under other important heads.*—The works that require special mention are the following:—

	RS.	A.	P.
(1) Completion of the Rajampet range quarters ...	1,448	8	0
(2) Construction of compound wall for the same ...	238	0	0
(3) Formation of Korthimadugu-Dasarladoddi road in Cuddapah range (2 miles 3 furlongs 3 chains)	576	8	0

The remaining works are of a recurring nature such as repairs to roads and buildings, fire-protection and works of minor importance. The aggregate cost of expenditure under '8 (b) Conservancy and Works' and '52-A. Capital outlay' was Rs. 21,125.

5. *Income from main sources.*—Timber and fuel and bamboo coupe leases minor forest produce, grazing, penning fees, compounding fees for forest offences, departmental extraction of red sanders and other timber species by selection fellings and extraction of red sanders and sandalwood from Kodur plantation were the main items. The total revenue from all sources was Rs. 1,69,579. Details of revenue are given below:—

	RS.
Sandalwood (reserves)	110
Timber (from reserves)	7,979
Timber (from unreserves)	396
Fuel (from reserves)	1,24,056
Fuel (from unreserves)	333
Bamboos	4,925
Grazing	15,103
Minor Forest Produce (reserves)	3,430
Minor Forest Produce (unreserves)	4,666
Miscellaneous (including confiscations) (reserves and unreserves)	8,581
Total ...	1,69,579
Deduct—Refunds ...	347
Net ...	1,69,232

6. *The chief works done in the division.*—Almost all the fuel goes to Madras and several coupes are taken by Madras contractors. It is only since Madras contractors came in, that the revenue from the timber and fuel coupes rose steeply and the division showed a profit. It was working at a loss before that, largely because local contractors had a monopoly and combined to depress coupe prices at the sales.

Extraction of timber by selection fellings in the hill reserve and from the Kodur red sanders plantation was done departmentally. About 21,359 cubic feet of small timber and 5,984,160 cubic feet or 42,368 tons of fuel were available for sale during the year under report against 28,800 cubic feet of small timber and 31,300 tons of fuel in the previous year.

Grazing and penning were allowed as usual on permits issued at the fixed rates as before.

7. The financial results after apportioning the 'Direction' Receipts and Charges are as noted below:—

	Rs.
Revenue	1,69,243
Expenditure	94,906
Net profit ...	74,337

BELLARY, J. H. LONGRIGG,
25*th August* 1931. *Acting Conservator of Forests, Second Circle.*

ANNUAL ADMINISTRATION REPORT OF THE FOREST DEPARTMENT

FOR THE

YEAR ENDING 31ST MARCH 1931.

THIRD WORKING PLANS CIRCLE

CHAPTER I.—DETAILS OF WORK UNDERTAKEN IN CONNEXION WITH THE PREPARATION AND REVISION OF WORKING PLANS.

(i) General Survey.

The Working Plans Circle included, during the year under review, six working plan parties and the Sylvicultural Research division. One new working plan, that for Kollegal district, was taken up in August 1930 and two plans, those for the Ghumsur forests of Ganjam and the Mount Stuart forest of South Coimbatore, were completed in March 1931 and were submitted to the Chief Conservator of Forests for approval and sanction.

2. On the completion of the Ghumsur Working Plan, that working plans division was closed and a new division was opened in Lower Godavari to consolidate the scattered plans already in existence and to put under ordered working those parts of the district for which there are at present no working plans.

3. No new working plans division was formed to take the place of the Mount Stuart division, which was closed down on completion of the working plan, for the reason that the parties working were previously in excess of the sanctioned number, being six instead of five.

4. The total area of the forests of the Madras Presidency is 16,749 square miles.

Of this area there was, at the commencement of the year under review, 440 square miles under working plans prepared since the

inception of the Working Plans Circle; during the year the working plans for Mount Stuart and Ganjam were completed and submitted for sanction making an additional 654 square miles under working plan.

Working plans were in progress during the year for a further 1,919 square miles.

An area of 7,606 square miles is under working plans and schemes prepared by other agency, which mostly now require revision.

5. Preliminary arrangements were made for the creation of a second Sylvicultural Research division for work in the dry forests.

A triennial programme of research for both the Sylvicultural Research divisions was under preparation at the close of the year, it having been decided to draw up, in the first place, a triennial programme, on which the annual plan of operations will be based, and, subsequently, when this programme is nearing completion, and more exact knowledge of the work has been obtained, to consider the advisability of preparing for the future quinquennial programmes.

(ii) PROGRESS MADE IN WORKING PLANS.

6. *No. 1 Working Plan Division—Working plan for the Ghumsur forests.—*

Area covered by the working plan—600 square miles.

Total cost of preparation of the working plan—Rs. 56,676.

Date of initiation of the working plan—February 1928.

This working plan was completed on 28th March 1931 and is now with the Chief Conservator of Forests for approval and Government's sanction.

A Deputy Conservator of Forests, Mr. M. Kesavanunni Nayar, I.F.S., was in charge of the working plan throughout the period, from February 1928 to 28th March 1931, that it has taken to complete it.

His staff consisted during the year under review of two rangers and one forester.

This working plan has for its aim the rehabilitation of the Sal forests that were largely ruined by over-exploitation in the interests of the Russellkonda Sawmill, during the years 1922—27.

Any considerable profit in working is therefore not to be expected, and it is, indeed, fortunate that the financial results anticipated show a small surplus of Rs. 3,050 per annum, and not an annual loss for many years.

7. *No. 1 A Working Plan Division—Working plan for the Mount Stuart forests of South Coimbatore Forest division.—*

Area enumerated and stock-mapped in previous years.	Area enumerated and stock-mapped in 1930-31.	Total area enumerated and stock-mapped.
19,925	7,037	26,962

Total area covered by the working plan—54·43 square miles.

Total cost of preparation of the working plan—Rs. 1,22,679.

Date of initiation of the working plan—7th September 1927.

As pointed out last year the cost of the working plan would have been much less had it been possible to post sufficient subordinates to this division earlier.

This working plan was completed on 1st April 1931 and is pending with the Chief Conservator of Forests for approval and Government's sanction.

Mr. M. V. Laurie, I.F.S., was in charge of the division from its inception until 20th January 1931 when he proceeded to Dehra Dun, after practically completing the work.

The Conservator was in additional charge of the working plan from 20th January 1931 till date of its closing.

Mr. R. B. Cornwell, I.F.S., was posted as an attached officer from 6th December 1930 to 15th April 1931, and attended to the completion of the working plan maps and to various other matters after Mr. Laurie had left for Dehra Dun.

The working plan staff during the year consisted of two rangers and twenty-one foresters.

The plan for the Mount Stuart forests also aims chiefly at reconstituting a forest that has been overworked in the past, though not, in this case, in the recent past. The financial results expected are therefore a matter for congratulation. An annual net surplus of Rs. 1,24,000 is anticipated which amounts to Rs. 3·56 per acre. The gross anticipated revenue per acre is Rs. 9·27, and the gross expenditure is Rs. 5·71, the expenditure thus being 61·6 per cent of the gross revenue.

For a forest that was, some 40 years ago, reported to contain no timber of any value, and which is now under process of rehabilitation, this is, to say the least of it, satisfactory.

8. *No. 2 Working Plans Division for the forests of Mangalore South and North—*

Staff—

One Deputy Conservator—Mr. P. W. Davis—throughout the year;

Two Extra Assistant Conservators—One from 6th April 1930 to 24th July 1930 and from 27th August 1930 to 30th November 1930, and another from 1st May 1930 to 30th September 1930 and from 27th November 1930 to 31st March 1931;

three rangers, one supernumerary ranger and four foresters, throughout the year; and

one ranger and one forester—for one month only.

Of the above staff two rangers, one supernumerary ranger and two foresters, working throughout the year, and one ranger and one forester, working for one month, were employed on the *South Mangalore Working Plan;* and one Extra Assistant Conservator of Forests, one ranger and two foresters were employed on the *North Mangalore Working Plan.*

The Deputy Conservator of Forests was responsible for both working plans.

Mangalore South division—

Total area of the working plan—438·0 square miles.

Date of initiation of the working plan—29th November 1927.

Details of work.		Acs.	Cost per acre. Rs.	A.	P.
Prior to 31st March 1930 ...	Area enumerated ...	1,345	0	5	11·7
Do. ...	Area stock-mapped...	54,230	0	0	0·6
In 1930–31 ...	Area enumerated ...	502	0	8	3
Do. ...	Area stock-mapped...	143,437	0	2	0

Mangalore North division—

Total area of the working plan—359 square miles.

Date of initiation of the working plan—6th April 1930.

Details of work.		Acs.	Cost per acre. Rs.	A.	P.
In 1930–31 ...	Area enumerated ...	115	0	6	1·5
Do. ...	Area stock-mapped...	75,158	0	0	0·3

9. *No. 3 Working Plans Division for the Silent Valley Forests of Palghat.—*

Total area of the working plan—139·27 square miles.

Date of initiation of the working plan—3rd January 1929.

Staff—

One Extra Assistant Conservator of Forests, Mr. T. V. Venkateswara Ayyar, as Working Plans Officer.

One ranger and five foresters till 18th December 1930, and one ranger and six foresters till the end of January 1931 and then two rangers and seventeen foresters till the end of March 1931.

Details of work.		Acs.	Cost per acre. RS. A. P.
Prior to 1930 ...	Area enumerated (100 per cent enumeration).	1,500	0 6 9·6
In 1930-31 ...	Area enumerated (50 per cent enumeration)	8,500	0 0 7·2

This working plan is practically confined to rain forest, consisting of very dense tall evergreen forest, with a big lower storey, and heavy undergrowth, swarming with leeches.

10. *No. 4 Working Plans Division for the forests of North Coimbatore and Kollegal—*

Staff.—

One Deputy Conservator of Forests, Mr. C. R. Ranganathan, I.F.S., as Working Plans Officer in charge of both working plans.

One supernumerary ranger, four trained foresters, and two foresters, worked throughout the year. Three more rangers were added to the staff in August, November and February 1931 and one forester in November 1930. One temporary forester was appointed on 11th December 1930 and another in March 1931.

North Coimbatore division—

Total area of the working plan—877 square miles.

Date of initiation of the working plan—6th April 1928.

Details of work.		Acs.	Cost per acre. RS. A. P.
Prior to 1930 ...	Sandalwood—		
	Area enumerated (100 per cent enumeration) ...	24,589	0 0 9·7
In 1930-31 ...	Area stock-mapped (general) ...	267,200	0 0 0·6
	Area stock-mapped (detailed) ...	63,365	0 0 5·8

Kollegal division—

Total area of the working plan—947 square miles.

Date of initiation of the working plan—September 1930.

Details of work.		Acs.	Cost per acre. RS. A. P.
In 1930-31 ...	Sandalwood—		
	Area enumerated ...	24,268	0 0 0·6
	Area stock-mapped (general).	22,350	0 0 0·4

11. *No. 5 Working Plans Division for the Wynaad Ghat forests—*

Total area of the working plan—106 square miles.

Date of initiation of the working plan—9th September 1929.

Staff—

One Deputy Conservator of Forests, Mr. A. N. Sarma, I.F.S., throughout the year.

One ranger and four foresters throughout the year and one ranger and four foresters from the middle of February to the end of March 1931.

Details of work.		Acs.	Cost per acre. RS. A. P.
Prior to 1930 ...	Area stock-mapped.	13,888	0 0 1·67
...	Area enumerated...	Nil.	Nil.
In 1930-31 ...	Area stock-mapped.	15,680	0 0 1·5
...	Area enumerated (33 per cent) ...	7,360	0 4 3

This working plan is largely confined to rain forest similar to that of the Silent Valley referred to above.

12. *Lower Godavari Working Plans division (will be No. 1 Working Plans division)—*

Total area of the working plan ... ... 488 square miles.

Date of initiation of the working plan ... ... March 1931.

Staff—

One Extra Assistant Conservator of Forests, Mr. V. N. Seshagiri Rao, as Working Plans Officer.

One supernumerary ranger and one forester.

Details of work.—The working plan was taken up only in March 1931, and the staff was employed on the preparation of the reconnaissance report.

13. *Working plan for the New Amarampalam forests of Nilambur division.*—The preparation of this working plan is in the hands of Mr. R. S. Browne, I.F.S., the District Forest Officer of Nilambur Forest division, under the joint control of the Conservator of Forests, Third (Working Plans) Circle, and the Conservator of Forests, Sixth (Territorial) Circle. The preliminary enumeration survey was made by the old logging engineering division in 1926—1928. At that time the clear-felling of rain forests, and extraction by American lumber methods, was contemplated, but subsequently the injurious effects of such operations in evergreen sholar became evident, and a different method of treatment had to be prescribed. The working plan that is now being drawn up will pay strict attention to the principles of sustained yield and adequate regeneration after exploitation.

CHAPTER II.—SYLVICULTURAL RESEARCH AND EXPERIMENTS.

14. Mr. A. M. C. Littlewood (Deputy Conservator of Forests) held charge of the office of Forest Research Officer throughout the year.

15. The work done by the Forest Research Officer and by Mr. B. S. Kesava Vittal, Extra Assistant Conservator of Forests on special duty in connexion with the sylviculture of the rain forests, has been fully dealt with in Parts I and II of the annual report on sylviculture. Part III of that report contains details of experiments done by District Forest Officers, and Part IV contains a summary of the working plan operations. A brief resumé of the sylvicultural research work done is given below, in paragraph 17 et seq.

Records continued to be maintained on the model which obtains at the Central Forest Research Institute, Dehra Dun. They were periodically reviewed by the Conservator.

16. *Establishment.*—The staff of the Forest Research Officer consisted of two rangers and two foresters, one forest guard and three maistries.

There has been no change in the clerical staff which consists of one clerk and one typist.

17. *Summary of Sylvicultural Research conducted by the Forest Research Officer*—(1) *First year tending in teak plantations.*—Work has been in progress at Nilambur for some years on the effect of soil æration and of reducing weed competition in varying degrees in teak plantations in their first year. The treatment given has varied from a mere cutting back of weeds round the

plants, through forking in circles round the plants and (scraping) in broad belts along the lines, to deep forking in similar lines along similar broad belts. As might be expected the last two methods gave the best results. More unexpectedly it was found that there appears to be little to choose between these last two methods. Both methods have given a marked and almost equal improvement in the rate of growth and general vigour of the plantations as well as a decided prolongation of the growing season. This, and other observations, have led to the suggestion that soil æration may be secondary in importance to root-competition for moisture. Further observations made during the year lend some support to this view. Repeat experiments are being made in 1931–32 paying the closest attention to the initial comparability of the strips subjected to the different treatments.

(2) *Seed origin experiments—Teak.*—Small scale nursery experiments carried out in the past two years gave indications of earlier germination of seed from localities of heavy rainfall. Experiments at Nilambur, Walayar and Mount Stuart conducted on a larger scale this year with seed from each of these origins were inconclusive.

(3) *Possible unsoundness in teak plants raised from root-and-shoot cuttings.*—Plants whose origin from root-and-shoot cuttings is known with certainty are being sent periodically to the Forest Botanist at Dehra Dun for examination for signs of rot.

(4) *Teak root-and-shoot cuttings on laterite and optimum time and method for planting out the cuttings.*—Suggestive results were obtained from a set of plots in which root-and-shoot cuttings were put out, some in May and some in June, and in each case some in prepared pits and some in scrowbar-holes. Somewhat surprisingly the May planting gave very markedly better results. Pits showed an advantage over crowbar-holes. The rate of growth of these plants raised on lateritic soil from root-and-shoot cuttings compares not unfavourably with that of average nursery seedlings on alluvium.

(5) *Underplanting in teak plantations.*—This investigation has been in progress for some years and the results are summarized in last year's sylvicultural report. Work during this year has been confined to observation of the old plots, and to further experiments with *Chloroxylon Swietenia*, with the Burmese bamboo, *Cephalostachyum pergracile*, and with nursery plants of *Bambusa arundinacea*. The last mentioned gave results of some promise.

(6) *Elephant-grass in teak plantations.*—Arrangements have been made for the study of this problem in 1931–32.

(7) *Teak in mixture on laterite.*—The mixed crop resulting from the treatment described in paragraph 24 of last year's sylvicultural report was tended and measurements were taken. The repeated tending necessary to save the teak in such a mixture from suppression is a serious practical objection to the method of regeneration attempted.

(8) *Re-stocking "gaps" caused by selection fellings in mixed deciduous forest.*—Attempts to stock with teak "gaps" caused by selection fellings in mixed deciduous forest of good quality (but considered unsuitable for clear-felling and artificial regeneration) met with little or no success. The problem is one which calls urgently for solution and arrangements are being made for further work in this direction.

(9) *Strobilanthes.*—There is nothing to add to last year's sylvicultural report on this subject except that the plots in which this weed had been cut continued free of regrowth.

(10) *Root-and-shoot cuttings—Various species.*—The plants raised from root-and-shoot cuttings of *Hopea parviflora*, *Artocarpus hirsuta*, rosewood, *Lagerstræmia lanceolata*, and *Mangifera indica* in the plot referred to in paragraph 116 of last year's sylvicultural report have put on satisfactory height growth, but the casualties during the year in all species have been considerable. New work with root-and-shoot cuttings of *Xylia xylocarpa*, *Albizzia lebbek*, *Gmelina arborea*, *Pterocarpus marsupium*, *Schleichera trijuga*, and *Terminalia paniculata* gives promise of success.

(11) *Improvement of poor dry coppice forest.*—No further work was done, but the plots were kept under close observation. No conclusion can be drawn at this stage.

(12) *Seed weights.*—Certain additions to the list are recorded.

(13) *Aids to germination—Teak.*—A very tentative conclusion is that teak seed from localities of heavy rainfall is best used in the year of collection and that from drier climates perhaps improves with keeping. But confirmation is needed. Somewhat suggestive results were obtained by treatment of teak seed with sulphuric acid, following last year's trial of this method with other species. In scarcely any case was the percentage of germination affected adversely by this treatment and in the majority of cases the percentage was increased. In every case germination was hastened by the treatment.

(14) *Flowering of bamboos.*—Information from many parts of the Presidency regarding the years of flowering of *Bambusa arundinacea* and *Dendrocalamus strictus* was collected and recorded.

18. *Summary of sylvicultural research in the rain forests of Tinnevelly by Mr. B. S. Kesava Vittal, Extra Assistant Conservator of Forests.*—(1) The results and conclusions of the past three years' work show that there is no difficulty in establishing regeneration, at a small cost, about twelve annas per acre of forest, in gaps made in the course of selection fellings, in the evergreen rain forests of Madras. The experiments with the planting of *Mesua ferrea*, *Aglaia Roxburghiana*, *Chickrassia tabularis*, and *Hopea parviflora* have given good results. In the case of most species no tending is needed in the first year, but in the second and third years freeing the tops of plants is necessary, and in all likelihood slow-growers like Mesua will need attention till the fifth year, or even later. The cost of such tending should not exceed four annas per acre of forest per annum for the first three years. A good nursery, properly fenced, is essential and the key-note of success is the collection of seed *at the correct time*. The height growth of natural regeneration already on the ground can be increased by a careful opening out of the canopy.

(2) *Nursery practice.*—Both the covered and uncovered nurseries were maintained and the attack from vermin was entirely checked by keeping the nursery fences in proper repair. The nursery sowings gave satisfactory results. Acid-treated seed of *Acrocarpus fraxinifolius* gave 48 per cent success. Seeds of *Chickrassia tabularis* and *Hardwickia pinnata* collected carefully *at the right time*, i.e., February–March and October respectively, and sown immediately gave satisfactory results. The transplanting of 350 *Araucaria Cunninghamii* ('Hoop pine') seedlings into bamboo baskets was a success.

(3) *Regeneration operations in the forest*—(i) *Artificial regeneration of gaps.*—The artificial regeneration in 1929 and 1930 of gaps caused by selection fellings in Coupes I and II respectively, by dibbling seed and planting seedlings of various species has continued to prove satisfactory. In the case of certain species, viz., Mesua and Aglaia, planting had to be resorted to as the seed of the former is attacked by vermin if dibbled, and the seed of the latter species is available at a time of year which is not suitable for direct sowing. In Coupe II seed of *Balanocarpus utilis* dibbled in December 1930 gave 100 per cent success and the plants were four inches high at the end of March 1931. In the gaps of Coupe I, regenerated during 1929–30, the plants of fast-growing species like Toon, Chickrassia and Acrocarpus were freed from weed and shrub competitors. In the gaps of Coupe II, regenerated during 1930–31, no tending was done.

(ii) *Artificial regeneration of unworked forest.*—From the regeneration operations conducted in 1929 and 1930 in an unworked

forest it appears that it is not difficult to get up a sufficient number of seedlings of the desired species by dibbling or planting, or a combination of both. Dibbling is not always to be relied on in the case of certain species whose seeds are either eaten by vermin, or give poor germination, or are available at an inconvenient time. In such cases planting is the only solution. The plants resulting from the 1930 regeneration operations were tended once in 1930.

The seedlings in the two control gaps of 1928–29 fellings were freed from oppressive weeds twice, once in the south-west monsoon and again in the north-east monsoon. The plants were re-measured in March 1931 and they all showed an appreciable increase in height growth. Further observations are necessary before definite conclusions can be drawn.

(iii) The heights of 100 plants in each of the two one-acre plots and the control plot of half an acre, opened in 1929 in the coupe to study the effect of the gradual opening of the canopy on natural regeneration, were re-measured in March 1931. The experiment indicates that the height growth of existing natural regeneration in the evergreen forests can be stimulated by a judicious opening of the canopy of the understorey; considerable further experiment is necessary to determine the optimum amount of light.

(iv) *Miscellaneous experiments.*—(1) The trees of miscellaneous species in the two Acrocarpus plots, described in paragraphs 20 and 21 of last year's sylvicultural report, Part II, that were girdled, are being kept under observation.

(2) Sawn pieces of timber of thirteen different species were buried in ant-hills and watered. The results in June 1931, a year later, showed that eight of them were badly attacked by white-ants and in the case of the other five no results are available, since the original pieces were removed by coolies and fresh pieces were put down in March 1931.

(3) In a 3-year old teak plantation three plots and three control plots were opened in March 1930 to study the effect on the growth of young teak seedlings of soil æration and removal of root competition by forking, mamuti scraping and weed-cutting round the seedlings. It is too early to draw any conclusions, but the seedlings in the forked and mamuti scraped plots show that they have certainly benefited by the treatment.

(4) *Regeneration of gaps caused by selection fellings in the Silent Valley of Palghat division.*—In May 1930, 100 gaps were selected at random in Coupe II of the Silent Valley at Neelikal with the object of finding out what percentage of them contained sufficient natural regeneration of the desired species to warrant their

not being taken up for artificial regeneration. Seedlings in the gaps and also to a width of five yards around their borders were enumerated. The enumerations showed that only five gaps were without useful regeneration and no gap was devoid of useful regeneration inside the five yards margin. Established natural seedlings of Dichopsis and Mesua, i.e., seedlings 9 inches to 2½ feet high, have not suffered to any extent in the smaller gaps, though in the bigger gaps they show signs of withering. In three of the gaps seed of *Artocarpus hirsuta* was dibbled in May 1930 with satisfactory results; and in four other gaps seed of *Dalbergia latifolia* was sown in June and July 1930 with no success.

19. *Summary of sylvicultural experiments by District Forest Officers*—(1) *Artificial regeneration—Acacia cyanophylla.*—Experiments in the artificial regeneration of *Acacia cyanophylla*, a quick-growing drought-resisting species, in dry fuel forests, were continued. Where the species was established height growth was phenomenal, but success in establishing a crop was poor. Future experiments are obviously called for, as the species is most promising, but they should be in the purely preliminary stage in order to make sure of germination and establishment.

(2) *Prosopis juliflora* is another drought-resisting species, which has done well in many tropical countries, into which it has been introduced. It is commonly known in its own home (Mexico) as ' Mesquite '. Experiments carried out in Chittoor, Tinnevelly, and Kollegal divisions indicate that there will be little difficulty in introducing it into felled coupes, but here again we should at present confine our experiments to the preliminary stage.

(3) *Shorea robusta (Sal) in Ganjam.*—Experiments to find out the best method of establishing adequate sal regeneration in the Ravine Working Circle, where it is deficient, were started in 1928. It has been found that, given a suitable soil, it is possible to get up in one year abundant seedlings by means of dibbling good, fertile seed at the correct time. But it is still to be seen to what extent these artificially raised seedlings will develop into the ' switch ' stage and so become established.

(4) *Pterocarpus santalinus (red sanders).*—Experiments in the artificial regeneration of red sanders were carried out in the Chittoor district by broadcast sowings and putting out basketed one-year old plants, with varying results. Propagation of this species by cuttings was a failure.

(5) *Cephalostachyum pergracile (Burmese bamboo).*—An experiment was started at Nilambur to raise an underwood to teak, of *Cephalostachyum pergracile*, in the 1902 plantation. The experiment was a success and, as this bamboo is small and therefore

unlikely to interfere with teak on any but the poorest soils, it should be more suitable for our present purpose than our indigenous *Bambusa arundinacea*.

(6) *Propagation with cuttings*.—Experimental planting with cuttings of various fuel and timber species was undertaken in certain coupes of the Chittoor and South Salem divisions. Though many of the species tried their best, and developed buds and shoots, most of them died in the hot weather. *Albizzia amara* and *Lebbek* did the best, but it is still to be seen whether even these will weather the summer months and establish themselves.

(7) *Tectona grandis* (*teak*).—(i) In North Mangalore division teak dibbled in gaps after selection fellings gave satisfactory results, but 50 per cent of the seedlings are forked and it is a question whether this semi-evergreen forest is really suited to teak. At the same time *Xylia xylocarpa* and *Dalbergia latifola* seeds were dibbled on the borders of the gaps with fair results.

(ii) In Ganjam teak was introduced in two small areas in Coupes I and II of the Ravine Working Circle in 1920 and 1923. In 1929, 12 more or less dominant stems in the 1923 plantation when measured had girths varying from 13 to 17 inches at 4 feet 6 inches and heights from 39 to 45 feet. This plot is prescribed in the revised working plan, which was completed early in 1931, as an observation area, requiring re-measurement every five years.

(iii) In Lower Godavari division from 1921, experiments in the introduction of teak in suitable areas, where it did not already exist, have been carried out in felled coupes, after burning the debris. The results have been satisfactory and dibbling and notching of germinating seed from ' dumps ' have given equally good results as planting one-year and two-year old stumps. Results also show that the growth on non-cultivated areas is slightly better than areas that have been cultivated for one and two years.

(iv) In Upper Godavari division in 1929 an experiment to determine the relative superiority of one-year and two-year old teak stumps was started. So far the one-year old stumps have given better results than stumps two years old. But here again it is too soon to say anything definite and further observations are necessary.

(8) *Zizyphus jujuba*.—Experimental sowings with *Zizyphus jujuba* were tried in the Chittoor district with satisfactory results. The seed was sown in patches amongst coppice growth in a felled coupe and, again, right in the open in an inspection shed compound: the percentage of survivals in the hot weather of 1931 in the former area were much greater than in the latter. Better results might have been obtained had the sowings been done on mounds.

(9) *Sandal.*—(i) Various germination tests of sandal were conducted in the North Salem, North Coimbatore, and Kollegal divisions with different objects in view. But the most satisfactory method is to sow the seed, after removing the pulp, under light shade in a ' dump '.

(ii) Experiments in the artificial regenerations of sandal were carried out on a large scale in North Salem; the most successful method tried is to hasten germination by making a ' dump '. This consists of a shallow basin made in the ground containing worked up soil with a layer of sand on top, on which is placed a layer of sandal seed covered with a sprinkling of earth and then covered with straw, which in the nursery is watered on alternate days.

As seeds germinate the seedlings are pulled out and transplanted into the forest together with a suitable host of a slightly larger size, which has been raised in a similar way. The layer of sand is used in order to make it easy to pull out the seedlings without damaging the roots. In North Coimbatore and Madura experiments with the object of raising sandal by sowings with dhall and ragi were undertaken with varying results.

(iii) In Kollegal an attempt to raise sandal plantations in a dry, poor clear-felled area, with fuel species as hosts, met with poor success. The sandal germinated well, but such seedling as may have been established have no hosts to nourish them, since only a fraction of those introduced show any signs of surviving.

(iv) In North Salem sandal stumps from $2\frac{1}{2}$ years old plants have done well and if this method proves a success it will help greatly in getting sandal to establish itself and will constitute a big advance in our knowledge regarding the propagation of sandal.

(v) Field observations in connexion with spike investigation were continued during the year in North and South Salem, Kollegal, Coorg, and Vellore. Ecological surveys and investigations into the insect life of sandal areas were also undertaken.

(vi) In North Coimbatore and North Salem experiments have been started to find out whether by artificially reproducing conditions similar to those on cultivated lands, it would be possible to arrest, control or cure spike disease. No results are available as yet, as the experiments were started only at the close of the year.

(10) Experimental sowings with miscellaneous species were undertaken in several districts.

In Madura seed of *Artocarpus hirsuta* dibbled near Kumili gave fair results, whereas the transplanting of *Hopea parviflora* was a failure. Basketed seedlings of *Chloroxylon Swietenia* put down in a timber area at Vannathiparai gave satisfactory results. Sowings of various timber and fuel species were undertaken in felled fuel coupes in the Madura, North Salem, Tinnevelly, and Nellore districts with varying results.

(11) *Natural regeneration—Shorea Talura.*—In Chittoor it has been found that by ærating the soil once in three months round natural seedlings of *Shorea Talura* that come up near old stumps of this species, it is possible to enable such seedlings to develop into saplings and establish themselves.

(12) *Avicennia officinalis* (*Mangrove*).—In Guntur experiments show that whenever mangrove forests are protected by a good, strong fence, from cattle and man, the natural regeneration already present improves rapidity.

(13) *Early-burning experiments.*—In North and South Cuddapah divisions experiments to investigate the possibility of early-burning in some of the *Pterocarpus santalinus* (red sanders) forests as a means to save the seedlings and small saplings of this species have been undertaken. It is too early to draw conclusions and further observations are being made.

(14) *Miscellaneous experiments.*—(i) In Upper Godavari, to ascertain the rate of girth increment of individual *Chloroxylon Swietenia* trees, sample plots have been opened in a mixed crop and a pure crop. The general indication at present is that on the better soils the rate of growth is fair; but it is too early to come to a final conclusion at present.

(ii) In the same division four plots to conduct regeneration experiments with *Hardwickia binata* under different conditions of treatment have been opened; no results are yet available.

(iii) In Nellore, three small experimental plots were opened with the object of getting (1) reliable data of the height and girth increment of *Pterocarpus marsupium, Pterocarpus santalinus, Hardwickia binata, Anogeissus latifolia* and *Chloroxylon Swietenia*; (2) to check the rate of coppice growth of these species and (3) to compare the rate of growth of coppice shoots by various methods of treatment.

The plots were opened only in 1928, so no conclusive results have yet been obtained.

(iv) In Kurnool West two experimental plots have been recently opened to find out the best way of regenerating a bamboo cum timber forest; and whether by close planting of teak, with

a small admixture of *Pterocarpus marsupium*, it would be possible to suppress weed-growth and minimize fire risk.

(v) In Kurnool South, sample plots in timber and pole areas have been opened to arrive at rates of growth. Also four sample plots have been laid out in a mixed timber forest and in a nearly pure *Hardwickia binata* area to arrive at yield and rate of growth.

(vi) In South Cuddapah the results of an experiment show that the leaves from pollarded *Diospyros melanoxylon* trees are superior in quality to the leaves from non-pollarded trees for ' beede ' (native cigarette) wrappers; and that also the yield is higher.

(vii) In North Cuddapah experiments have been started to find out (1) how to get the maximum area of ' rab-sowing ' successfully done, with a minimum of slash and debris to burn; and (2) with soil-working and ash and soil mixing, as a part of the regeneration process. The experiments have only recently been started and conclusions cannot yet be drawn.

(viii) The experiment in South Salem to exterminate prickly-pear by means of the cochineal insect has proved successful, though the spread is slow. Further results are awaited.

(ix) In Kollegal an experimental plot has been opened recently to find out the effect of special fire-protection on natural regeneration of teak in poor pole areas subject to fires.

(x) In North Mangalore an experiment has shown that Strobilanthes (species unknown) can be destroyed by cutting back to near ground level six months after seeding. Also that not only does the existing natural regeneration of *Xylia xylocarpa*, consisting of seedlings and root-suckers, benefit considerably by the removal of the pest, but that fresh seedlings and root-suckers soon make their appearance in large numbers after the clearance.

CHAPTER III.—ADMINISTRATION.

20. Mr. C. C. Wilson was in charge of the Circle throughout the year.

The following officers were attached to the Circle as Working Plans Officers, Assistant Working Plans Officers and Officers on Special duty:—

Working Plans Officers.

Mr. M. V. Laurie, Assistant Conservator of Forests in charge of the Mount Stuart Working Plans Division, from 1st March 1930 to 20th January 1931.

Mr. M. Kesavanunni Nayar, Deputy Conservator of Forests, in charge of the Ganjam Working Plans Division, from 1st March 1930 to 28th March 1931.

Mr. P. W. Davis, Deputy Conservator of Forests, in charge of the Mangalore South and North Working Plans Divisions, throughout the year.

Mr. C. R. Ranganathan, Deputy Conservator of Forests, in charge of North Coimbatore and Kollegal Working Plans Divisions, throughout the year.

Mr. Ananthanarayana Sarma, Deputy Conservator of Forests, in charge of the Wynaad Ghat Forests Working Plans Division, throughout the year.

Assistant Working Plans Officers.

Mr. T. V. Venkateswara Ayyar, Extra Assistant Conservator of Forests, in charge of the Silent Valley Working Plans Division of Palghat, throughout the year.

Mr. H. E. Brown, Extra Assistant Conservator of Forests, from 6th April 1930 to 24th July 1930 and from 27th August 1930 to 30th November 1930. Attached to Mangalore Working Plans Division.

Mr. M. H. Krishnaswami Ayyar, Extra Assistant Conservator of Forests, from 1st May 1930 to 30th September 1930 and from 27th November 1930 to 31st March 1931. Attached to Mangalore Working Plans Division.

Officers on Special duty.

Mr. A. M. C. Littlewood, Deputy Conservator of Forests in charge of the Forest Research Division.

Mr. R. B. Cornwell, Deputy Conservator of Forests, attached to the Circle office in connexion with the completion of the Mount Stuart Working Plan from 6th December 1930 to the end of the year.

Mr. B. S. Kesava Vittal, Extra Assistant Conservator of Forests in charge of the sylvicultural research into the regeneration and exploitation of the rain forests.

21. The Conservator visited all localities where the preparation of working plans was in progress, and toured in the Upper and Lower Godavari and the Tinnevelly Forest divisions; where working plans are urgently required. That for Lower Godavari was taken up towards the end of the year.

He also visited all the areas in which the Forest Research Officer (or Provincial Sylviculturist) had opened experimental plots.

22. *Health.*—The health of the establishment was on the whole satisfactory.

The staff suffered from malarial fever to a rather less degree than is usual in the case of men employed on the preparation of working plans; this is due, no doubt, in part, to the careful anti-malarial precautions enforced by the superior staff.

OOTACAMUND, C. C. WILSON,

1st September 1930. *Conservator (Working Plans), Third Circle.*

ANNUAL ADMINISTRATION REPORT OF THE FOREST DEPARTMENT

FOR THE

YEAR ENDING 31ST MARCH 1931.

FOURTH CIRCLE

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. ALTERATION IN AREA.

Reserved forests and reserved lands.—The total area of reserved forests decreased from 3,836 square miles to 3,834 square miles, chiefly owing to the disreservation of 175 acres in Ambur reserved forest, Vellore division, and to the disreservation of 551 acres in Mallapuram reserved forest for assignment to ryots and 214 acres in Pallipatti reserved forest for assignment to Koravas in Central Salem division.

(ii) *Reserved lands.*—There has been no change in the area of reserved lands during the year.

2. FOREST SETTLEMENT.

2. The settlement of an area of 26·75 acres being admitted patta enclosures in Karuthamalai reserved forest, Vellore division, notified under section 4 of the Forest Act was under progress during the year.

3. DEMARCATION.

3. Rupees 102 was spent in the Chittoor division on white-washing and tar-numbering cairns. In Vellore division Rs. 137 was spent on reclearing and maintenance of boundaries. In North Salem Rs. 124 was spent for demarcating six and a half miles of

reserved forests and Rs. 130 on reclearing and widening the district boundary line between Salem and North Arcot and Kangundi zamindari (Chittoor district). In Central Salem Rs. 233 was spent on demarcation and construction of cairns for 9·77 miles and Rs. 881 on clearing 373¼ miles of lines including top lines. Rupees 1,247 was spent in cutting coupe lines and strip lines including planting of coupe stones. Rupees 20 was spent in demarcating the Thirthagiri reserved land with cairns. Rupees 32 was spent in reclearing the reserve lines of Arana and Thirthagiri reserved lands to a distance of 16 miles. In South Salem Rs. 10 was spent for clearing the base line in the Adukkam-Puducombai block. The existing boundary lines of reserves were cleared as usual by the protective staff free of cost except the top lines in South Salem which were maintained by Malayalis under the reward system.

4. Forest Surveys.

4. (*a*) *By the Survey of India.*—In Central Salem the Survey of India Party surveyed part of South Arcot and Salem districts, on 1 inch to a mile scale while the survey of Arana and Thirthagiri reserved lands was done by them on 4 inches to 1 mile scale. In *South Salem* No. VIII Party commenced its work from December 1930 on topographical survey and dealt with the following reserves and reserved land :—

Vedambium, Veppadi, Vengamudi, Vanjarai, Periasholai, Gundur, Poolambadi, Ariyalur, Atur-Manmalai, Adukkam-Pudukombai, Perumalmalai and Bailnad.

Printed sheets in respect of the above reserves alone have been forwarded by the Officer, Survey Party, for verification.

(*b*) *By the Madras Survey.*—The resurvey of Omalur and Salem taluks was completed during the year and that of Harur taluk in *Central Salem* is in progress. In *South Salem* the party completed the survey of boundaries of reserved forests adjoining patta holdings during their resurvey of Namakkal and Rasipur taluks. The proof copy of Perambalur taluk plan referred to last year is still pending with the Collector of Trichinopoly. The survey of Bailnad, Adukkam-Pudukombai and Perumalmalai reserved lands taken up by the same party during March 1929 was completed after the close of the official year.

(*c*) The survey of coupes was as usual carried out departmentally.

(*d*) Reference maps were maintained in all the divisions.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

Preparation and Control of regular Working Plans.

(*a*) Preparation.

5. The scheme sanctioned for the working of the forests in the Odugathur range was taken up for revision first by Mr. A. R. Narasimha Ayyangar, Extra Assistant Conservator, and then by Mr. Abdul Ali Khan, Assistant Conservator. As both of these officers were transferred before they could make any substantial progress the work was kept in abeyance pending the bifurcation of the division. In *North Salem*, a three-year temporary scheme was sanctioned by the Conservator for working the sandalwood areas. The preparation of consolidated working plans for the *Central* and *South Salem* divisions referred to last year was completed during the year in the light of instructions given by the Chief Conservator, the Working Plans Conservator, and the Territorial Conservator, and the Working Plans were sent to the Chief Conservator for sanction shortly after the close of the year.

(*b*) Control.

The prescriptions of the working plans and schemes were generally adhered to, and the control returns were reviewed by both the Territorial and the Working Plans Conservator. Proper sanction for the deviations from the working plans has been obtained. The extraction of sandalwood was confined to dead trees only instead of dead and dying trees as per prescriptions in the working plan. In *Vellore* green trees were extracted in unreserves as well as reserved trees in patta lands. The bamboo coupes in Shevaroys South range, *Central Salem* division have been given rest for a period of three years from 1929–30 under the orders of the Chief Conservator.

2. Communications and Buildings.

(*a*) Roads and Bridges.

6. Form 29 shows the number and capital value of the roads and bridle-paths including culverts and buildings and wells in each division. All District Forest Officers have certified that all permanent buildings and roads borne on the books of the Forest Department in their divisions with few exceptions have been properly

cared for during 1930–31 and that they have been kept in good repair.

The total expenditure on new works and repairs during the year was Rs. 8,535 and Rs. 17,363 against Rs. 6,025 and Rs. 18,757 respectively in the previous year. The important new works undertaken during the year were :—

Chittoor.—Improvement of Nagapatla-Bhakrapet road to a distance of 9 miles and 6 furlongs.

Vellore.—

(1) Part-construction of a new road in continuation of Kavalur-Vasantapuram road.

(2) Part-construction of Mandaparai-Nadanur road.

(3) Improvements to Gillman road by soiling.

(4) Reducing gradients in Latham road.

(5) Re-alignment of section IV of Attimur-Patrakad road.

(6) Alignment of a bridle-path from Krishnapuram to Kottur.

North Salem—

(1) Improvement to the ghaut portion of the Anchetti-Kundukotta road and the construction of a causeway.

(2) Improvements to the Hogainkal-Biligundlu road.

South Salem—

(1) Extension of Pudupatti-Pillayarkoil road beyond Nagapallikinar to meet the boundary of Pudupatti reserved forest.

(2) Improvement to Pudupatti-Pillayarkoil road.

(3) Alignment of a road trace to Kalapanayakanpatti-Nadukombai road from the bridle-path from Nadukombai.

(*b*) *Buildings.*

7. The expenditure during the year on new buildings and the maintenance of the existing ones (including the pay of watchers) during the year was Rs. 10,421 and Rs. 13,350 against Rs. 17,414 and Rs. 14,885 respectively in the previous year. The important new works undertaken during the year were :—

Vellore—

(1) Part-construction of a rest-house at Nellivasal.

(2) Extension of sandalwood godown at Tirupattur.

(3) Construction of a zinc shed in the sandalwood depot at Tirupattur; and

(4) Construction of a latrine to the District Forest Officer's quarters.

North Salem—

(1) Extension of the existing final cleaning shed and putting up a corrugated zinc pandal in front of the double-lock room.

(2) Construction of latrines for the Denkanikota West Range Officer's quarters and the Aiyur rest-house.

South Salem—

(1) Construction of outhouses at Kulivalavu.

(2) Paving the Turaiyur Range office floor with Cuddapah slabs.

(3) Paving the Mayambadi rest-house floor with concrete broken stone in mortar; and

(4) Special repairs to the Ranger's quarters at Namakkal.

(*c*) *Miscellaneous.*

8. The cost of new works and repairs during the year was Rs. 1,738 and Rs. 215 against Rs. 4,353 and Rs. 417 respectively in the previous year. The chief works undertaken during the year were :—

Chittoor.—Completing the trial shaft for a well at Mittalam.

Vellore—

(1) Digging a trial shaft at Paramanandal.

(2) Trial boring at Nellivasal.

(3) Further deepening the well in the Tiruppattur rest-house.

North Salem—

(1) Completion of sinking a well in the rest-house compound at Denkanikota.

(2) Deepening the wells for the inspection sheds at Geratti and Nedugampalli.

South Salem.—Deepening the well at Pudupatti.

3. Protection of Forests.

(*a*) *General protection.*

9. The following statement shows the offences registered during the year as compared with the previous year.

Offences relating to reserves dealt with by Forest Officers.

	1930–31 Number.	1929–30. Number.
Injury to forests by fire	259	167
Unauthorized fellings	3,781	3,733
Unauthorized grazing	* 901	963
Other offences	* 119	224
	5,060	5,087

The increase under fire was due to the unusually severe hot weather and to incendiarism by graziers, and under " fellings " to a large number of cases of theft of leaf manure detected in South Salem division. The decrease under " Unauthorized grazing " is satisfactory but calls for no special remarks.

10. *Sandalwood cases—Chittoor and North Salem.*—Nil. *Vellore.*—One case of illicit transport of fifteen pieces of sandalwood was charged on suspicion by the local Excise Inspector at Villupuram railway station. The matter was referred to the police who treated it as undetectable. The matter is under correspondence with the Excise Inspector. Besides this five sandalwood cases were detected of which three were prosecuted and convicted, one withdrawn and one compounded. *Central Salem.*—Two cases were reported during the year; one was transport of sapwood billets without property mark, and another was illicit transport of sandalwood. The former was compounded for Rs. 25 and the latter is still pending. *South Salem.*—Six sandalwood cases were detected during the year as against seventeen of last year. Two cases were compounded, three prosecuted and one withdrawn. All the three cases prosecuted ended in conviction. In one case the accused was fined Rs. 10, the offence being theft of two small sandalwood billets. The other two cases were sensational ones and underwent protracted trial in court. In one case the accused was convicted and sentenced to seven months' rigorous imprisonment and in the other, two out of the four accused were sentenced to one year rigorous imprisonment while the other two accused were acquitted. The one case withdrawn appeared to have been foisted on the accused and no material evidence was available to charge him. The two cases reported last year to be pending also ended in conviction.

Liberal rewards were granted in these cases.

* Decrease.

11. *Offences relating to unreserves dealt with by Revenue officials.*—These exclude offences relating to reserves under panchayat management—

	1930–31 Number.	1929–30. Number.
Injury to forests by fire	* 2	5
Unauthorized felling	* 2,913	3,283
Unauthorized grazing	* 22	60
Other offences	* 109	126
	3,046	3,474

No convincing reason has been furnished by Revenue officials for the allround decrease.

12. *Cases relating to reserves brought to trial—*

Year.	Number.	Convictions.	Acquittals.	Percentage of failure.
1929–30	564	389	175	31·03
1930–31	2,211	410	1,801	81·45

The large variation is due to the fact that cases settled by the Sub-Magistrate on payment of compounding fees in court which were hitherto shown under B. cases compounded have been shown under A. cases taken to court as per Chief Conservator's orders.

13. *Cases relating to unreserves brought to trial—*

Year.	Number.	Convictions.	Acquittals.	Percentage of failure.
1929–30	165	104	61	32·90
1930–31	265	105	160	60·37

The apparent increase was due to acquittals after payment of compounding fees in court which were hitherto shown under B. cases compounded.

The number of cases settled by the payment of compounding fees in court and acquitted in consequence thereof is given below :—

	Reserves.	Unreserves.
Chittoor	219	Nil.
Vellore	577	107
North Salem	86	19
Central Salem	726	50
South Salem	155	Not known.

Figures in respect of unreserves in *South Salem* division are not available.

* Decrease.

14. The percentage of offences personally enquired into by the District Forest Officers, Extra Assistant Conservators and rangers is given below :—

	District Forest Officers.	Extra Assistant Conservators.	Range Officers.
	PERCENTAGE.	PERCENTAGE.	PERCENTAGE.
Chittoor	1	...	9
Vellore	·13	·6	5·7
North Salem	3	...	16
Central Salem	1·13	...	2·63
South Salem	2	...	12

The amounts of compounding fees realized during the year in reserves and unreserves as compared with those of the previous year are given below :—

Reserves.		Unreserves.	
1930-31.	1929-30.	1930-31.	1929-30.
37,776	* 38,058	24,647	* 29,655

The instructions issued in G.O. No. 990, Revenue, dated 13th June 1910, were generally followed in fixing compounding fees.

15. *Patrol system.*—The patrol system was not generally in force during the year for want of sufficient numbers of subordinates to be placed on special duty. However in *Chittoor*, special patrols were occasionally organized to detect forest offences. In *Vellore* the Range Officers made surprise inspections for effective protection. In *North, Central* and *South Salem* divisions special patrols consisting of beat subordinates were organized and surprise inspections were made under the leadership of the Range Officers. This had the desired effect, resulting in the decrease of offences and the cases detected were promptly dealt with.

16. *Rewards.*—In *Vellore* Rs. 50 was sanctioned for forest subordinates for the detection of a case of illicit cutting of fifteen sandalwood trees in Tiruvannamalai range and Rs. 20 was sanctioned for the detection of a sandalwood theft in *Vellore* depot by the depot watcher. In *Central Salem* Rs. 15 was sanctioned by the Conservator to late Ranger Mr. Sambamurthi Ayyar and Rs. 10 to the tanadar, Kacharoyapalaiyam, for the detection of a sandalwood theft case in Atur range and a further sum of Rs. 37 was sanctioned by the Conservator to Ranger V. Narayanaswami Ayyar and one forester and three forest guards for the detection of a sandalwood theft case in Shevaroys South range. In *South Salem* rewards amounting to Rs. 137 were disbursed to Police officials, private individuals and railway authorities and another handsome

* Correct figures furnished by District Forest Officers.

reward aggregating to Rs. 180 was sanctioned by the Chief Conservator; Rs. 100 for a Sub-Inspector of Police, Rs. 50 for a forester and Rs. 30 for a tanadar.

(*b*) *Protection from fire.*

17. The total area attempted to be protected from fire during the calendar year 1930 was 2,811 square miles of which 2,746 square miles were successfully fire-protected at a cost of Rs. 6,884.

Special protection.—The area under special protection was 1,048 square miles as compared with 1,082 square miles in the previous year. An area of 1,031 square miles was successfully fire-protected during the year against 1,064 square miles in the previous year, the percentage of failure being 1·62 against 2·49 in the previous year. The decrease calls for no special remarks.

General protection.—The area under general protection was 1,763 square miles against 1,759 square miles in the previous year, the percentage of failure being 2·72 against 2·83 in the previous year. The variation is small.

Early-burning.—This operation was not carried out in this Circle as there was no need for it.

(*c*) *Protection from cattle.*

18. The total area closed to grazing was 206 square miles out of 2,820 square miles of reserved forests under departmental control. The area opened to grazing to all animals except goats was 2,614 square miles of reserved forests. The number of cattle impounded during the year was 11,574 against 12,069 in the previous year. The decrease was in *North* and *South Salem*.

(*d*) *Protection against injuries from natural causes.*

19. *Lantana.*—In Vellore uprooting and burning of lantana in 40 acres in Coupe II, Komatteyeri Series, was done at a cost of Rs. 20. In *North Salem* clearing of lantana was done in all the sandalwood coupes in connexion with the enumeration, general tending and extraction of sandal trees. In Krishnagiri range, lantana is reported to be spreading rapidly in some of the fuel coupes. A sum of Rs. 309 was spent in uprooting lantana in the isolated lines of the spike experimental plots newly opened for the year. In *South Salem* lantana is spreading on the plateau of the Kollimalais and the spread is encouraged by clearing of jungle growth in unreserves for Ponakad cultivation. It is also getting a foothold in the Pachamalais.

Creeper cutting.—This was done in all sandalwood areas prescribed for the year and in timber coupes in *Chittoor* and *Vellore* divisions according to the prescriptions of the working plans.

Prickly-pear.—The cochineal insect was introduced during the year with a view to eradicate prickly-pear inside reserved forests. Inoculation was effected in almost all the ranges in the Circle. All fuel coupes due for working in the next five years are being treated with cochineal and the process will be repeated until all prickly-pear is destroyed. This is highly important as the eradication of prickly-pear in fuel coupes will facilitate working and should greatly improve prices, besides assisting the regeneration of important species which under present conditions are suppressed. The District Forest Officer, Chittoor, finds that the insect infects more successfully if given shade at the time of inoculation. This can be done by covering the infected part with pieces of healthy prickly-pear. The District Forest Officer, Chittoor, also observes that the species most commonly attacked is *Opuntia coccinellifera* and that the insect which attacks this species does not thrive on *Opuntia dillenii*. He reports, however, having obtained from the Local Fund Department at Gudiyattam a brood which attacks *Opuntia dillenii* very successfully. He has been requested to ascertain where this can be obtained in large quantities so that other District Forest Officers who find that operations against *Opuntia dillenii* are unsuccessful may obtain their requirements.

Spike.—This is dealt with under ' Research and Experiments ' —Chapter VI.

Bisons.—Bisons continued their usual damage to young sandal trees in all sandalwood areas where they occur. It is proposed to circumvent this attack in special regeneration areas by making fenced enclosures so small that bison will not consider it worth while breaking into them.

CHAPTER III.—SYLVICULTURE.

SECTION I.—FORMATION AND REGENERATION OF FOREST.

(i) *General progress of areas under regeneration.*

20. *Chittoor.*—Natural reproduction of sandal was fairly satisfactory in all ranges except Gudiyattam. Natural regeneration of red sanders was generally good.

Vellore.—Natural reproduction of sandalwood was good on the Javadis and in specially favoured localities on the Yelagiris.

Natural reproduction of *Choloroxylon Swietenia* and *Terminalia tomentosa* in Poongulam reserve, Tirupattur range, was specially good.

North Salem.—Natural reproduction of sandal was generally good except in Krishnagiri range, where it is never really successful, and in areas invaded by lantana in other ranges. Sandal is spreading also to the outskirts of the unreserves between Noganur and Pane reserves and between Thalli and Jowlagiri reserves in Denkanikota West range in spite of the prevalance of spike disease.

Hardwickia binata seeded profusely in Kestur Extension reserve in Anchetti range, this reserve having been closed to grazing on account of fires. This species is very prolific in the Cauvery valley, but it requires strict protection from fires and overgrazing to enable it to establish regeneration.

Central Salem.—Natural reproduction continued to be generally fair in the areas under regular working plans though in the case of fuel coupes of drier areas it was hampered by dense prickly-pear. This, however, is being successfully controlled by the introduction of cochineal insects.

Natural reproduction of *Hardwickia binata* was good in Cauvery range. Reproduction of sandal was good and profuse throughout the division. Sandal is spreading rapidly on the slopes of the Shevaroys and the Chitteris.

South Salem.—Natural reproduction of sandal was generally good. *Pterocarpus Marsupium* does well on the Pachamalais and on the eastern slopes of the Kollimalais, while *Cedrela Toona* thrives in the shola areas of the latter hill range. Reproduction of *Dalbergia latifolia* and *Anogeisus latifolia* was fair in the Pachamalais, the greater part of the reproduction appearing to be from root shoots rather than seed.

(ii) *Establishment of reproduction under working plans or schemes* (*Form* 34-*A*).

(*a*) Mainly natural.

21. Areas covered by working plans were generally worked under the simple coppice system except three coupes in Mamandur range, Chittoor division, where the system of coppice with standards was in force. Reproduction from coppice shoots in all felled fuel coupes was generally satisfactory except in Palmaner range in Chittoor division, where the advisability of suspending exploitation is being seriously considered.

(*b*) Mainly artificial.

22. *Chittoor.*—Sandal seeds were dibbled in the sandal propagation plots of the Sandal Regeneration Working Circle; the results were generally satisfactory. Red sanders seeds were dibbled in the two coupes of Mamandur Fuel Felling Series and in one coupe of Tirumalai Fuel Series, with the ashes formed by the burning of refuse, and red sanders regeneration operations were carried out in the compartments of the year of the Timber Regeneration Working Circle of the Mamandur range. It was found that broadcasting gave very poor results; at the end of the year there were no seedlings at all in the coupe in Tirumalai series although germination had been fair. *Acacia cyanophylla* seeds were sown as an experimental measure in Chittoor reserve of Gudiyattam range, Palmaner and Musulimadugu reserves of Palmaner range, Mordana reserve of Gudiyattam range, and Nagapatla reserve of Chamala range. Among the various methods adopted, sowing and planting on mounds with seeds boiled for five minutes produced the best results. The cost of these operations was Rs. 282–9–0. Seeds of *Prosopis juliflora* were sown in Musulimadugu reserve of Palmaner range and Nagapatla reserve of Chamala range in 1-acre plots in felled coupes as an experimental measure. The result was only moderate.

Vellore.—Regeneration by dibbling sandal seeds in blank areas in sandal coupes and in special tending areas was unsatisfactory on the whole as also the regeneration from sowings in 1-acre plots of the special tending areas. Though seedlings germinated profusely they generally succumbed during the succeeding hot weather. The " dumping method " employed in connexion with spike investigation work in North Salem division, is being tried. Restocking of fuel coupes was undertaken as ordered in Chief Conservator's Proceedings No. 4517–30, dated 13th May 1930. Seeds of timber species were collected but sowing is postponed to next year for want of sufficient seeds this year. The work of planting cuttings in one fuel coupe in each range is in progress. Cuttings of *Albizzia amara* will be given a fair trial.

North Salem.—Regeneration operations prescribed in the Hosur Sandalwood Working Plan were suspended. Sowings of indigenous timber species were carried out, but the seedlings were retarded by the very prolonged hot weather. The sowings of sandal seeds were carried out in plots; 5,279 seedlings were surviving at the end of the year in the 31 two-acre plots taken up during the year. In the non-sandal areas of Dharmapuri range, for example, Hogainkal, Dasampatti, Galigattam and Garigapatti, sandal seeds were dumped in patches under bushes and seedlings are coming up vigorously even at low elevations. Such areas have been located in the

maps and progress is being watched. A 6-acre plot divided into various sub-plots was opened in October 1929 at Jowlagiri. Hosts were sown in the sub-plots and then sandal was introduced. Sandal sown with *Pongamia glabra* and *Acacia Farnesiana* gave the most promising results as usual. The sylviculture of sandal is being studied in this plot which is maintained mainly for spike research work. An experiment has just been started at Jowlagiri and various species have been sown with a view to see whether lantana areas which have been badly burnt can be restocked.

Central Salem.—Sandal propagation was carried out by dibbling seeds in 5-acre plots in Sanniyasimalai reserved forest and in 1-acre plots elsewhere. The germination in 1-acre plots was fair but very few seedlings survived during the severe hot weather of 1931. As a result of the sowings in Sanniyasimalai reserve there were 159 surviving seedlings on 23rd April 1931. *Acacia decurrens* has been established in this reserve though its growth is not very satisfactory in this poor soil. Some of the Shevaroy planters are taking an interest in this species which should do very well on average soils at high elevations.

South Salem.—Sandal seeds were sown in 1-acre plots of all the ranges. The result was moderately successful on the whole, Namakkal range showing the best results. Cuttings of different fuel species were planted during the year. Of these *Albizzia amara* and *Albizzia Lebbek* have given the best results, particularly the latter.

(c) Afforestation.

23. Nil.

(iii) *Plantations and other forms of regeneration not under working plans or schemes* (*Form* 34-*B*).

24. *Vellore.*—No fresh areas were taken up during the year. A sum of Rs. 5 was spent on thinning teak Acha trees in Amerdi plantation and a sum of Rs. 15 for thinning bamboos in the Ambur tope. The total revenue realized during the year was Rs. 55.

Central Salem.—Artificial regeneration was carried on in the Kurumbapatti palmyra tope, and the undergrowth in Coupe IV, 32 acres, was cleared during the year and palmyra seeds were dibbled. The result was fairly good.

(iv) *Tending.*

25. General tending was done in all current sandal coupes except in the unreserves included in the coupes in *North Salem* division. The tending consisted of freeing the crowns of sandal by

cutting creepers and overhanging branches of other trees interfering with them. Tending was done along with enumeration in *Vellore* and *South Salem* divisions. In addition to the tending of sandal, climbers on other species were cut in the compartments of the year of the timber regeneration series of Mamandur range at a cost of Rs. 306–12–0, cleaning operations were carried out in the felled coupes of 1928–29 and 1929–30 at a cost of Rs. 170–7–0, and cleaning and thinning operations were done in Coupe I of Chittoor reserve at a cost of Rs. 3–12–0.

(v) *General.*

26. *Vellore.*—Measurements of heights and girths of trees in the sample plots of Polur and Santhavasal ranges were recorded during the year.

North Salem.—Girth measurements of sandal seedlings resulting from the sowings commencing from 1927 are maintained by the respective Range Officers.

Section 2.—Tending of the Growing Stock.

27. *Vellore.*—Special tending operations were carried out in the special tending areas, the size of the areas having been restricted to 10 acres as directed in the Chief Conservator's Reference 9151–C–2 of 1929–I., dated 10th December 1929.

CHAPTER IV.—EXPLOITATION.

(*a*) System of Management.

28. The total area under working plans and schemes during the year was 2,619 square miles; the various sylvicultural systems in force are detailed below :—

	Area in square miles.	Percentage to the total area under working plan.
Selection method	692	26·42
Simple coppice	524	20·01
Coppice with standards	38	1·45
Method of improvement fellings ...	692	26·42
Pastoral method	137	5·23
Unworked or worked with no system.	536	20·47
Total area under working plans ...	2,619	100·00

The difference of 101 square miles between Form 28 and the above figures is due to the overlapping of areas covered by bamboo, sandal and fuel working plans with each other in Vellore division.

The following statement shows the area exploited during the year under the various sylvicultural systems in each division :—

Division.	Timber clear-felling.	Coppice with standards.	Simple coppice.	Selection fellings.	Improvement fellings.	Total.
		ACS.	ACS.	ACS.	ACS.	ACS.
Chittoor	..	150	1,315	12,973	..	14,438
Vellore	..	408	1,592	99,478	18,984	120,462
North Salem	..	..	673	..	40,019	40,692
Central Salem	..	..	2,622	4,692	46,505	53,819
South Salem	..	..	333	13,519	16,303	30,155
Total ..	..	558	6,535	130,662	121,811	259,566

(*b*) EXPLOITATION BY DEPARTMENTAL AGENCY.

29. Sandalwood was the chief product extracted and marketed departmentally. A quantity of 20 tons 47 quarters of final cleaned dead sandalwood and 8 tons 15 quarters of final cleaned green sandalwood was sold at Vellore against 105¼ tons in the previous year; 160 tons 69 quarters of final cleaned dead wood and 34 tons 24 quarters of final cleaned green wood was sold at Tiruppattur against 296¾ tons in the previous year. The total amount realized at both the depots for the aggregate quantity of 223 tons 74 quarters was * Rs. 1,76,194 as against Rs. 5,66,727 for 402 tons in the previous year. The sandalwood sales for this year were first fixed for December 1930 but subsequently postponed to February 1931 at the request of merchants on account of trade depression in foreign markets. Sales were held at Vellore and Tiruppattur on 5th and 7th February 1931 respectively. The Chief Conservator and the Conservator were present at the sales. Owing to general depression of trade abroad there was no competition and even the small quantity sold fetched only half the price obtained last year. In last year's sale, the wood from Tiruppattur depot fetched better prices (Rs. 1,400 per ton) than the wood at Vellore (Rs. 1,358 per ton) but the reverse was the case this year as seen from the statement appended :—

	Vellore depot average price per ton.	Tiruppattur depot average price per ton.
	RS.	RS.
Dead wood	883	766
Green wood	899	800

*Of this sum Rs. 1,74,529 was realized before the close of the year and the balance after the close of the year.

This is the first year in which the entire stock of sandalwood in both the depots has not been sold. A statement showing the stock put up for sale, stock sold, the deficit in delivery and the balance of dead and green sandalwood that remain in both the depots is appended :—

	Stock put up for sale.		Stock sold.		Deficit in delivery.		Unsold stock available in the depot.	
	Dead.	Green.	Dead.	Green.	Dead.	Green.	Dead.	Green.
	T. Q.	T. Q.	T. Q.	T. Q.	T. Q.	T. Q.	T. Q.	T. Q.
Vellore ..	41 30	18 21	20 47	8 15	0 14	0 33	20 49	9 53
Tiruppattur ..	300 13	125 55	160 69	34 23	3 27	1 52	135 77	89 60

Timber.—There are no big timber forests from which timber is extracted on a commercial scale in this Circle and there is not much demand for such timber as is available on the Javadis in *Vellore* and on the Kollimalais in *South Salem*. *Hardwickia binata* in Dharmapuri range, *North Salem* division, is however being tested as railway sleepers. In *Chittoor* 2,874 cubic feet of timber of different species was extracted during the year, the net outturn in dressed logs being 2,313 cubic feet. Of this 2,260 cubic feet was sold to the public for Rs. 3,953. In *Vellore* no departmental operations were undertaken but 90·5 cubic feet was obtained by cutting indicator areas and by thinning trees in Amerdi plantation. Of this quantity and the quantity already in stock, 440 cubic feet was sold, 170 cubic feet was written off as wastage and the balance 710 cubic feet was kept in stock for the construction of a rest-house at Nellivasal. *North Salem.*—The only timber operation was the preparation of *Hardwickia binata* sleepers for supply to the South Indian Railways as samples. Four hundred and forty-nine cubic feet of timber was felled in addition to 533 cubic feet in stock last year. Besides this 750 cubic feet of timber was felled. Of this 240 cubic feet was utilized for departmental works, 499 cubic feet sold to the public in round logs and 8 cubic feet of Acha sleepers and saplings was supplied to the Utilization Officer. In *Central* and *South Salem*, timber required for departmental works was collected.

Fuel—Indicator areas.—The District Forest Officers were not able to report with any precision on the accuracy of the figures recorded by contractors or on the results of checks imposed on them with regard to indicator areas. The following information was however collected.

Chittoor.—The quantity removed from the reserve as estimated on the basis of the indicator area figures was 944,126 cubic feet

while the contractor's accounts show that only 523,523 cubic feet was removed from the reserves. The stacking of fuel by contractors leaves much to be desired and in many cases the fuel is converted into charcoal and the quantity so converted is estimated. This may account for the large variations between the contractor's figures and indicator area estimates.

Vellore.—The fuel obtained from the indicator area was measured in stacks of 81 cubic feet, each stack being taken as equivalent to 1 ton. But the figures furnished by contractors are calculated by cart-loads, 1 cart-load being taken as equivalent to half a ton. The contractors furnish the yield in cart-loads and the check exercised is to see that contractors always issue permits for every cart-load removed so that the number of cart-loads given by the contractors can be taken as correct. But the outturn as given by the contractors and converted as mentioned differs very much in some cases from the outturn obtained from the figures of indicator areas as shown in the statement appended :—

Name of coupe	Number of tons as reported by contractor.	Number of tons as worked by indicator areas.	Excess.	Deficit.
Usur	271	112	..	159
Kylasagiri	147	109	..	38
Vellakkal	104	64	..	40
Thellai	229	252	23	..
Nacharkuppam	66	134	68	..
Nayakaneri	339	442	103	..
Panankatteri	107	157	50	..
Pachakuppam	160	310	150	..
Pallipattu	218	143	..	75
Asanampet	282	300	18	..
Rasimalai	87	136	49	..
Nellimalai	36	99	63	..
Komiar	217	168	..	49

North Salem.—The indicator areas were worked in Krishnagiri range alone. The following is the result of comparison of outturn with the contractors' figure :—

	Bags of charcoal of 56 lb. each per acre.	
	Outturn of indicator area.	Outturn of contractors.
Maharajagadai Coupe I	10	10
Maharajagadai Coupe II	14	29
Bargur Coupe VII	45	34
Nandibanda Coupe VII	46	29
Naralapalli Coupe VII	56	75

The District Forest Officer states that it has been observed by experience that 6½ tons of fuel yield 1 ton of charcoal or 16 per cent on the gross fuel outturn. The figure usually accepted is 20 per cent.

Central Salem.—The Range Officers were ordered to check and verify the outturn furnished by the contractors with reference to the duplicate of permits submitted by them along with the accounts. The result has not been communicated.

South Salem.—A comparison of the contractors' fuel outturn with that of the indicator areas is given below:—

Name of coupe.	Outturn in indicator area. Yield per acre in cubic feet.	Outturn of contractor's working. Yield per acre in cubic feet.
Bodamalai Coupe XX ...	... 800	426
Pudupatti Coupe XXIV ...	... 543	252
Tirumanur Coupe XVIII ...	... 898	115
Mavar Coupe XIII ...	... 1,240	1,619
Gangavalli Coupe IX ...	... 886	837
Karavalli Coupe XVIII ...	... 955	598
Thondamanthurai Coupe VII	... 400	149

It is felt that little reliance can be placed on the accuracy of the outturn furnished by the contractors.

Chittoor.—Twenty-one thousand one hundred and sixty-five cubic feet of fuel was collected departmentally. Of this 7,433 cubic feet were disposed of during the year leaving a balance of 13,732 cubic feet at the end of the year. *Vellore.*—Twenty-six thousand seven hundred cubic feet of fuel was collected by cutting coupe lines and indicator areas in addition to 44,000 cubic feet in stock last year. Out of these total stock of 70,700 cubic feet, 600 cubic feet was utilized departmentally for burning bricks, 51,000 cubic feet was sold in auction. In North, Central and South Salem the fuel obtained in indicator areas was handed over to contractors after collecting the cost of felling, billeting and stacking and supervision charges.

Bamboos—Vellore.—One hundred bamboos were obtained in thinning bamboo clumps in Ambur plantation and they were sold during the year. Two hundred and thirty bamboos in *North Salem*, 40 bamboos in *Central Salem* and 285 bamboos in *South Salem* were collected and used for departmental works.

Minor forest produce.—Seeds of timber species including sandal-wood were collected in all divisions for cultural operations and for

supply to other divisions. In *Vellore* 273 quarters of divi-divi pods was collected during the year; but there was no demand, and it remained unsold. *North Salem*.—About 31 quarters of washed lac was obtained during the year against 3 quarters in the previous year at an estimated value of Rs. 308. Detailed results of lac operations are given in Chapter VI. *Central Salem*.—A net quantity of 107½ Madras measures of dried coffee berries was collected departmentally from the relinquished Argos coffee estate in the Mallapuram ghaut reserved forest and was sold for Rs. 16. Experimental lac operations were conducted by infecting *Shorea Talura* and *Schleichera trijuga* trees on the Chitteris and 26 lb. of washed lac was obtained. The experiment was a success so far as the lac was concerned, but it involves the sacrifice of potentially valuable timber.

(c) Exploitation by purchasers.

30. The fuel and bamboo coupes and minor forest produce farms were as usual sold to contractors in all the divisions. Timber trees in timber improvement coupes of Kottur and Poongulam reserves in *Vellore* and in Kottapatti reserve in *Central Salem* were sold standing.

The following statement shows the quantity of major produce and the value of minor produce removed by all agency during the year and in the previous year:—

Year.	Timber in thousands of cubic feet.	Fuel in thousands of cubic feet.	Bamboos.	Grass and grazing.	Other minor forest produce.
			Nos.	Rs.	Rs.
Reserves.					
1929-30	40	1,794	146,873	1,99,220	69,994
1930-31	56	1,344	114,158	1,84,985	49,489
Unreserves.					
1929-30	614	498	311	..	96,377
1930-31	673	653	23	1	82,494

The variations are explained in Chapter V.

Form 35 shows the quantities of timber exploited during the year. The quantity shown under sawn or square timber in North Salem relates to sawn timber and it represents the net outturn of sawn materials. The statement appended shows districtwar the gross yield of timber, the quantity of logs and poles (timber in

the rough) the quantity of timber, from which dressed logs were obtained and the quantity from which sawn timber was obtained during the year :—

Districts.	Gross yield (in thousands of cubic feet).	Wastages and Rejections.	Quantities of logs and poles (timber in the rough) (in thousands of cubic feet).	Quantities of logs from which sawn timber was obtained (in thousands of cubic feet).	Quantities of logs from which dressed logs were obtained (in thousands of cubic feet).
Chittoor ..	3	1	..	..	2
Vellore ..	(a)	..	(a)	..	..
North Salem ..	1	..	..	1	..
Central Salem.	1	..	1	..	..
South Salem ..	(a)	..	(a)	..	..
Total ..	5	1	1	1	2

(a) Less than 500 cubic feet; hence ignored.

31. *Grazing*.—Of the total areas of reserved forests and reserved lands 92·27 per cent was opened to grazing against 93·20 per cent in the previous year. The incidence of grazing in the several districts of the Circle is given below :—

District.	Area in acres.	Cow-unit.	Number of acres per cow-unit.
Chittoor	293,760	59,065	4·97
Vellore	425,600	112,440	3·79
North Salem	352,000	59,741	5·89
Central Salem	440,960	119,066	3·70
South Salem	160,640	43,969	3·65
Total ..	1,672,960	394,281	4·24

There was a decrease in the number of cattle grazed during the year as compared with the previous year in all the divisions except *South Salem* where there was a slight increase of 215 cow-units. The number of acres per cow-unit available during the year was 4·24 against 3·98 in the previous year. In *North Salem* many herds of cattle from Mysore graze in Madras forests at the ordinary local rates while it is reported that the Mysore Government charge double rates for foreign cattle grazing in their territory. The District Forest Officer is collecting statistics to address Government to reciprocate either by excluding foreign cattle or by charging them enhanced fees.

(*d*) EXPLOITATION BY RIGHT AND PRIVILEGE HOLDERS.

32. The following statement shows details of free grants utilized by right-holders and free grantees :—

—	Timber in thousands of cubic feet.	Value.	Fuel.		Bamboos value.	Grazing value.	Other minor forest produce.	Total.
			In thousands of cubic feet.	Value.				
		Rs.			Rs.	Rs.	Rs.	Rs.
Right-holders ..	..	..	..	..	..	..	..	..
Free grantees ..	17	5,313	..	..	435	1	31	5,780

The system of grazing of cattle by Malayalis under the Forest Village system under the initial deposit of 3 annas per cow-unit in *Vellore* and at 2 annas per cow-unit in *Central Salem* and the distribution of rewards to them for successful protection of reserves against fire continued during the year.

The proposals for revising the assessment of the Salem Kalroyans and Chitteris based on the census taken during the year are pending sanction of the Chief Conservator. In *South Salem* the concession of free grazing granted at the time of forest settlement of the Gundur and Ariyur shola reserves in the Namakkal range and V. Kanapadi extension and Palamalai extension reserved forests in Turaiyur range was not utilized by the Malayalis in spite of the notice published in the District Gazette. The reason for their failure to make use of the concession is reported to be due to their unwillingness to assume responsibility for the protection of the reserves. The Hill village scheme for the Bodamalais awaits the sanction of the Chief Conservator of Forests.

An attempt is reported to have been made during the year in the *South Salem* division to carry out in convenient centres a system of stall-feeding of cattle as suggested in the report on the Royal Commission of Agriculture. Though the advantages were explained to the ryots it is stated that none of them availed themselves of the advantages afforded.

(*e*) EXPLOITATION BY FREE GRANTEES.

33. *Chittoor.*—393·39 cubic feet of timber, 9,300 bamboos, 111 (2,220 cubic feet) of palmyra trees and 8·13 cubic feet of branch-wood were granted to and removed by free grantees for reconstruction of houses burnt by accidental fires.

Vellore.—Free grants were generally made from unreserves; but a free removal of 2,850 bamboos was allowed from reserved forests for the rebuilding of houses burnt by accidental fire as bamboos were not available in unreserves. Free removal of thatch grass was also allowed. The aggregate value of produce removed by the free grantees from reserves as well as unreserves amounted to Rs. 1,686.

North Salem.—Free grants were chiefly made from unreserves for rebuilding houses destroyed by fire. The aggregate value of the produce consisting of timber, bamboos and grass removed by the free grantees amounted to Rs. 302.

Central Salem.—Two thousand four hundred and forty-four cubic feet of timber valued at Rs. 11,57,489 head-loads of bamboos valued at Rs. 58–12–6 and 750 palmyra leaves valued at 12 annas were utilized by the free grantees from reserves and unreserves for rebuilding houses destroyed by fire.

South Salem.—Free grants of timber, bamboos and minor forest produce to the value of Rs. 1,806 were granted from reserves and unreserves for rebuilding houses destroyed by fire.

CHAPTER V.—FINANCIAL RESULTS.

34. The statement below shows the financial position of the year under report compared with that of the previous year for the circle as a whole :—

	1930–31.	1929–30.
	RS.	RS.
Receipts.		
Revenue	* 8,81,091	13,73,375
Refunds	8,733	10,372
Net ...	8,72,358	13,63,003
Expenditure.		
52-A. Capital	29,292	31,566
B. Conservancy and works.	1,40,608	1,35,796
C. Establishments	4,24,738	4,30,418
8.c.ii. Research	14,646	[illegible]
Total ...	6,09,284	5,97,780
Surplus ...	2,63,074	7,65,223

* The revenue excludes Rs. 2,535 relating to other circles as explained at the footnote of Form No. 39.

The revenue during the year decreased by Rs. 4,90,645 and the expenditure exceeded by Rs. 11,504 over that of the previous year.

35. The various contributions to the gross receipt of Rupees 8,83,626 are detailed below :—

	Per cent.
Major produce, Forest Department	*28·83
Major produce, Revenue Department	12·37
Bamboos, Forest Department	12·88
Grazing, Forest Department	20·84
Minor forest produce, Forest Department ...	6·46
Minor forest produce, Revenue Department ...	8·68
Miscellaneous items	9·94
Total ...	100·00

* Of this 19·75 per cent represents revenue from sandalwood.

36. Of the expenditure 6·94 per cent was on exploitation, 21·73 per cent on improvement and upkeep of forest, 65·53 per cent on administration and 5·80 per cent on miscellaneous items.

37. The important variations are explained below :—

Receipts.

(i) *By Government Agency.*

Sandalwood.—This is the chief item of revenue in this Circle. The revenue realized during the year was Rs. 1,74,529 against Rs. 5,66,727 in the previous year. The decrease has been explained in paragraph 29 of the report.

The quantity sold and the revenue realized during the year as compared with the figures of the previous year are given below districtwar :—

Divisions.	1929-30.		1930-31.				
	Quantity in tons.	Revenue.	Quantity.				Revenue.
			Tons.	Qr.	Lb	Oz.	
		Rs.					Rs. A P
Chittoor	4/8	792	0	29	24	0	330 9 10
Vellore	88 2/8	2,20,485	59	16	5	2	46,264 0 3
	64 1/8		*41	74	21	4	34,222 10 1
North Salem	212	2,95,237	100	20	1	11	77,907 10 11
Central Salem	133	19,316	..	*43	19	0	573 13 1
South Salem	17 5/8	24,150	8	7	13	7	6,126 15 11
Other Circles	5	6,747	10	57	26	2	8,233 2 4
			2	68	24	14	2,534 11 10
Total ..	402	5,66,727	223	78	23	8	1,76,193 10 3

* Represents green wood.

The difference between the sale amount shown and the revenue realized during the year is due to a portion of the amount being realized after the close of the year and to other items of revenue under this head.

Timber.—The revenue realized during the year was Rs. 4,615 against Rs. 4,939 in the previous year. The decrease which was in all divisions except *North Salem* was due in *Chittoor* to lower prices realized for *Shorea Talura* during the year than in the previous year, owing to general depression of prices in the timber market and in *South Salem* to the giving up of timber operations in the Namakkal Kollimalais and to the sale of the existing timber at lower prices for want of keen demand. The variations in other divisions are small.

Firewood and charcoal.—The revenue was Rs. 1,393 against Rs. 1,476 in the previous year. The decrease was in *Central* and *South Salem* and was due to lower prices obtained for the produce during the year in the two divisions and to crediting of an amount of Rs. 50 of Tirumanur Coupe XVIII indicator area fuel in *South Salem* in the accounts of 1929–30.

Minor forest produce.—The revenue was Rs. 119 against Rs. 304 in the previous year. The decrease was chiefly in Vellore and was due to the failure to sell divi-divi pods collected during the year for want of demand.

(ii) *Purchasers—Forest Department.*

38. *Timber.*—The revenue realized was Rs. 1,789 against Rs. 2,026 in the previous year. The decrease was in *Chittoor* and *Central Salem* and was due in *Chittoor* to lower prices realized for hair-comb wood during the year than in the previous year and in *Central Salem* to the payment of kist after the close of the year.

Firewood and charcoal.—The revenue realized was Rs. 72,452 against Rs. 64,619 in the previous year. The increase was in all divisions except *Central Salem* and was due generally to better prices obtained. Other causes were the sale of two coupes in *Chittoor* division which were not sold in the previous year, the sale of arrear coupes in *North Salem*, and the leasing out of Pudupatti arrear coupes of XXIII and XXIV left unworked by the previous year's contractor in *South Salem*.

Bamboos.—A sum of Rs. 1,13,827 was realized during the year against Rs. 1,45,667 in the previous year. The decrease was in all divisions except Chittoor and was due in *Vellore* to the collection of five instalments during the previous year as it was

the first year of sale of three years' leases against four instalments fallen due during the year. In *North* and *Central Salem* the decrease was due to low prices obtained for coupes on account of slackness of trade. In the coupes sold during the year in North Salem the growth was particularly poor. In *South Salem* the decrease was due to the leasing of only two small coupes during the year against the extensive bamboo series in Malayalapatti sold last year and to the gregarious flowering of big bamboos.

Grazing and fodder grass.—The revenue during the year was Rs. 1,84,115 against Rs. 1,99,202 realized in the previous year. The decrease was in all divisions except *South Salem* and was due partly to the mortality of cattle in all these divisions. The decrease was also due to the refusal of permits to all villagers adjoining reserves under panchayat management during the months of July and August which are the most important months in the grazing year. There was distress among agriculturists in *Vellore* owing to the fall of prices in markets for agricultural produce. On the other hand there was timely rain in *North Salem* which improved the grazing grounds in the unreserves and in the villages bordering the Cauvery river and spared the people the necessity for buying permits for reserves. An area of 12,750 acres in Perumbalai reserve in Cauvery range of *Central Salem* was disreserved and thus made available for free grazing; this further decreased the grazing revenue.

Minor forest produce.—Rupees 56,951 was realized during the year against Rs. 69,597 in the previous year. The decrease was in *Chittoor, Vellore* and in *South Salem* and was due generally to want of export facilities to foreign markets and to the general trade depression. A further fall was due to the non-sale of minor forest produce in Mamandur range and the Amburdrug stone-quarry of Gudiyattam range in *Chittoor*, to the exclusion of *Albizia amara* from the lease of manure leaves in *South Salem* and a poor tamarind crop in the same division.

By purchasers—Revenue Department.

39. *Timber.*—A sum of Rs. 65,811 was realized during the year against Rs. 95,764 in the previous year. The decrease was in all divisions and was due to fewer darkhast assignments during the year.

Firewood and charcoal.—The revenue realized during the year was Rs. 43,450 against Rs. 34,792 in the previous year. The increase was in *Chittoor, Vellore* and *North Salem* and was chiefly due to the sale of a large number of withered and windfallen trees, the result of a cyclone in *Chittoor* and *Vellore*.

Bamboos.—Only Rs. 3 was realized in *Vellore* during the year against Rs. 809 in *North Salem* and Rs. 2 in *Central Salem*. This is a fluctuating item.

Minor forest produce.—The revenue realized during the year was Rs. 76,719 against Rs. 95,623 realized in the previous year. The decrease was in all divisions and was due to the failure of tamarind produce in the cyclone-affected area in *Vellore* and to the unfavourable prices realized on account of trade depression in all divisions.

Miscellaneous.

40. *Fines and forfeitures.*—Rupees 3,864 was realized against Rs. 3,860 in the previous year. The variation is small.

41. *Rents of buildings.*—Rupees 8,092 was realized against Rs. 7,341 in the previous year. The increase was chiefly in *Chittoor* and *Vellore*. In *Chittoor* the increase was due to the adjustment during the year of a sum of Rs. 112 recovered on account of arrears of rent of certain buildings from Sayid Abdul Kadar Sahib Bahadur, I.F.S., and also to increased rent realized for the Range Officer's quarters at Mamandur and to the collection of arrears of rent of some other buildings in Gudiyattam range. In *Vellore* the increase was due to recovery of rent for the District Forest Officer's quarters throughout the year. In the previous years it was under construction and was occupied only for a few months.

42. *Other sources.*—The revenue realized during the year was Rs. 75,184 against Rs. 86,604 in the previous year. The decrease was in *Vellore* and *South Salem* and was chiefly due to fewer cases of ponakad cultivation and to sandalwood cases being prosecuted instead of being compounded as in the previous year.

43. *Refunds.*—The actuals during the year was Rs. 8,733 against Rs. 10,372 in the previous year. The decrease was in the *three Salem* divisions and was due to the value of unsold permits with the permit-issuing officers being less than that of the previous year in *North* and *Central Salem* divisions. In *South Salem* the decrease was due to the fact that there were no arrears of avaram bark lease contributions pending adjustment to the District Board, Trichinopoly.

EXPENDITURE.

B. Conservancy and Works.

The important variations are explained below.

44. *I. Sandalwood.*—The expenditure during the year was Rs. 40,814 against Rs. 34,484 in the previous year. The increase

was chiefly in *Vellore* and *South Salem* and was due to the extraction of more sandalwood during the year. Though a large quantity was extracted only a small quantity was sold and that at a very poor price. This accounts for the fall in the revenue.

45. *II. Timber and other produce removed from the forests by consumers and purchasers.*—The expenditure during the year was Rs. 49,345 against Rs. 46,038 in the previous year. The increase was chiefly in *Chittoor* and *Central Salem* and was due to the increased number of reserve watchers entertained during the year in place of forest guards whose posts were abolished as a measure of retrenchment; in *Chittoor* and in *Central Salem* more watchers were employed than last year and the expenditure incurred on cutting indicator areas was debited to this head.

46. *III. Maintenance, repairs, and replacement of stores, tools and plants.*—Rupees 532 was spent against Rs. 1,905 in the previous year. The decrease was chiefly in *Vellore, North* and *Central Salem* and was due in *Vellore* to not incurring any expenditure in repairing the sandalwood weighbridge, and the Avery beam scales in *North* and *Central Salem,* efficient repairs having been executed in the previous year.

47. *Works.*—Rupees 31,064 was spent during the year against Rs. 34,890 in the previous year. The decrease was chiefly in *Vellore* and *South Salem* and was due to closer scrutiny of estimate and to restricting repairs of roads and buildings to occasions where they were absolutely necessary.

48. *IV. Conservancy and regeneration.*—Rupees 13,904 was spent against Rs. 13,123 in the previous year. The increase was chiefly under regeneration and was due to carrying out intensive tending operations in sandalwood coupes during the year in *Chittoor, North* and *South Salem* divisions.

49. *V. Miscellaneous.*—The expenditure during the year was Rs. 3,342 against Rs. 4,116 in the previous year. The decrease was mainly in *North Salem* under ' Supplies and Services ' and was due to transferring the expenditure to ' 8.c.ii. Research.'

52-*A. Capital.*

50. *A. Forest surveys.*—Rupees 1,580 was spent against Rs. 580 in the previous year and the increase was due to the survey of Arana and Thirthagiri blocks in *Central Salem* and to the more rapid progress made in the survey of the proposed blocks in *South Salem* during the year.

51. *B. Organization, improvement and extension of forests.*—The expenditure during the year was Rs. 2,272 against Rs. 931 in the previous year. The increase was mainly under demarcation and was due to the wrong debit of Rs. 1,721 made by the Accountant-General to this head instead of to Forest Surveys.

52. *C. Communications and buildings.*—The expenditure during the year was Rs. 20,922 against Rs. 27,791 in the previous year. The decrease was in all divisions except *North Salem* and was due generally to postponement of works on account of financial stringency. In *Vellore* as the workmen and the subordinates suffered a great deal from malaria, progress on road works was not as satisfactory as had been expected.

53. *E. Purchase of stores, tools and plant.*—Rupees 4,518 was spent against Rs. 2,264 in the previous year. The increase was in all divisions and was due to furnishing all rest-houses with furniture to an improved standard.

8. *c. i. District Establishments.*

Variations.

54. *Pay of Officers—Non-voted*—(1929–30, *Rs.* 60,705; 1930–31, *Rs.* 77,188)—*Plus Rs.* 16,483.—The increase was due to a greater number of Imperial officers serving in the circle.

55. *Pay of Officers—Voted*—(1929–30, *Rs.* 45,790; 1930–31, *Rs.* 34,450)—*Minus Rs.* 11,340.—The decrease was due to the posting of an officer of the Imperial Forest Service to the charge of *Central Salem* division and to fewer Extra Assistant Conservators being on special duty during the year.

56. *Pay of establishment—Voted* (1929–30, *Rs.* 2,36,319; 1930–31, *Rs.* 2,32,590)—*Minus Rs.* 3,729.—The decrease was due to savings effected by not filling up short leave vacancies.

57. *Allowances—Non-voted*—(1929–30, *Rs.* 7,941; 1930–31, *Rs.* 11,504—*Plus Rs.* 3,563.—Due to the posting of an Assistant Conservator and the payment of transfer travelling allowance and arrears of travelling allowance of the District Forest Officer in *Vellore* and to the posting of an officer of the Imperial Forest Service as District Forest Officer, *Central Salem.*

58. *Allowances—Voted*—(1929–30, *Rs.* 45,820; 1930–31, *Rs.* 41,670)—*Minus Rs.* 4,150.—Due to less number of Extra Assistant Conservators on special duty, and to posting an officer of the Imperial Forest Service to *Central Salem.* The decrease was also due to some foresters' posts having been vacant for want of substitutes and to disallowances of fixed travelling allowance, for want of progress in works in *Vellore.*

59. *Charges payable to Government, departments and others* (1929–30, *Rs.* 4,096; 1930–31, *Rs.* 3,372)—*Minus Rs.* 724.—The decrease was chiefly in *Central Salem* and was due to the posting of an officer of an Imperial Service and consequently the payment of less amount to the Public Works Department in the shape of difference of rent to the District Forest Officer's quarters. The decrease was also due to payment of arrear rent in the previous year.

60. 8. *c. ii. Research—Charges payable to Government, departments and others* (1929–30, *Rs.* 7,449; 1930–31, *Rs.* 14,646)—*Plus Rs.* 7,197.—Due to adjustment of subsidy payable to the Indian Institute of Science, Bangalore, and of cost of investigation and staff connected with the entomological survey carried out by the Accountant-General in March final accounts, and transfer of expenditure on entomological survey to this unit from '8. b. Supplies and Services—Miscellaneous.'

The variations under other heads are small and call for no remarks.

CHAPTER VI.—RESEARCH AND EXPERIMENTS.

61. *Chittoor.*—In Chittoor division experiments to discover the best way of regenerating red sanders were continued. Seeds were sown during the period June to August 1930 in areas where mother trees of red sanders exist and the results achieved so far point to August as a better month for sowing these seeds, but whether this is so everywhere has yet to be proved. In areas where red sanders does not exist, cuttings of various girths, i.e., 3 inches, 4 inches, 6 inches and 9 inches were planted 3 feet apart in July to October 1930 but none of these cuttings were alive in May 1931. Plantings followed by weedings promised some success but better results were achieved by putting out and aerating basketed plants of one year old; the average height of 1929 plants is $6\frac{1}{2}$ inches and that of 1930 plants is 4 inches.

As usual four sample plots intended to record the growth of red sanders under various conditions were maintained.

Acacia cyanophylla.—The experiments with this drought resisting Australian species were continued during the year in the Palmaner, Chamala and Gudiyattam ranges, and with a slight deviation in Chittoor reserve. In the 1929 plots seedlings were planted at stakes or on mounds to replace casualties, and blanks were sown with seeds treated with sulphuric acid for five minutes or boiled in water for five minutes or soaked in cold water for 48 hours. The results were more satisfactory on mounds and

were at their best in Palmaner range, the biggest plant measuring 7 feet in height and 5½ inches in girth at 2 feet from ground level. Stump plantings from the biggest and smallest plants obtained from 1929 nursery, at an espacement of 6 feet by 6 feet, were tried, but without success. The failure was attributed to the months of June and July being unsuitable for planting in this division, which is more favoured by the north-east monsoon. In a further experiment seeds treated with concentrated sulphuric acid for five minutes were sown at stakes and on mounds, some of which were built over pits excavated and filled in, and others built on plain ground, with the result that mound sowings have always given better results than sowing in prepared patches or furrows. The experiments in Chittoor reserve were a complete failure; this may be due to something in the composition of the soil that does not suit *Acacia cyanophylla* but is more likely to be due to sowing too early.

Prosopis juliflora.—Direct sowings of this species over mounds at an espacement of 6 feet by 6 feet were carried out in August 1930 in Palmaner range and in June 1930 in Chamala range. At the end of April 1931 the percentage of germination in the former was 11 and 4 per cent of the seeds yielded seedlings which were alive at the end of April 1931. In this range the drier the weather the greater the casualties, while in Chamala range the result has been better in a dry locality than in a moist one. In *Central Salem Prosopis juliflora* seeds sown in October 1930 produced no germination at all; possibly the seeds were bad, for weather conditions were not entirely unfavourable. *Sandal seeds* sown on elevations of and above 1,500 feet in May and June 1930 resulted in 50 per cent germination though only 5 per cent survived the hot weather. In *Vellore* experimental sowings of sandal with dholl were carried out at Komatteyeri in June 1930, but the results are not satisfactory, there being only a few survivals.

62. *Experiments with cuttings of timber and fuel species.*—In *Chittoor* in one felled fuel coupe in each range cuttings of 6 feet 6 inches long of species selected from the following:—

Zizyphus jujuba, Melia indica, Terminalia Arjuna, Feronia Elephantum, Zizyphus xylopyrus, Chloroxylon Swietenia, Albizzia amara, Acacia leucophloea, Anogeissus latifolia, Hardwickia binata, Red sanders, Albizzia Lebbek, Boswellia serrata, and *Melia Azadirachta* were planted at intervals during the months June to December 1930, but with very poor results, *Boswellia serrata* in Gudiyattam range being the hardiest. To determine whether Red sanders seeds, from old trees would be more fertile than those from young trees, seeds from a tree of 45 inches girth and from

trees of 20½ inches to 23 inches girth, soaked in cold water for 24 hours were sown in Chittoor reserve on mounds at an espacement of 6 feet by 6 feet in June 1930. The countings so far made show that seeds from seed bearers 14 inches to 16 inches give better results than those from seed bearers 6 inches to 8 inches in diameter. This should be of value in regenerating the Mamandur and Chamala forests. In *South Salem* cuttings of various species were planted between November and December 1930 with the result that the *Albizzias* (*amara* and *Lebbek*) appeared to give promising results, especially the latter.

63. In *North Salem* sandal regeneration experiments were conducted at Denkanikota under the following heads:—

(1) Regeneration of sandalwood.

(2) Dumping method.

(3) Treatment with concentrated sulphuric acid.

(4) Transplanting.

(5) Stump planting.

1. *Regeneration of sandalwood.*—A maximum of 43 per cent of success in germination was obtained with seeds stored up to a period of thirteen months.

2. *Dumping.*—This method has been found to be very efficient, and germination takes place in twenty days compared to the normal germination period of two to three months. Dumping of sandal seeds with the seeds of *Acacia farnesiana* and *Cajanus indicus* has considerably increased the percentage of survivals after the hot weather.

3. *Treatment with concentrated sulphuric acid.*—Treatment with concentrated sulphuric acid has not induced a quicker germination of sandal seeds. Sandal seeds collected in October show a larger percentage of germination than those of the February collection. Sandal seeds soaked in water for a day mostly sink, and after this operation they germinate more readily. Sowing sandal seeds and host seeds together in ridges yielded seedlings in a month and in some cases, these reached a height of one foot in six months.

4. *Transplanting.*—Transplanting of sandal seedlings with various hosts have been successfully carried out both in the field and in pots, the hosts employed being *Acacia Farnesiana, Pongamia glabra, Cajanus indicus, Dendrocalamus strictus, Zizyphus jujuba, Carsicum fruitescens, Sesbania ægyptiaca*, etc. The minimum height attained in a year in the case of sandal was 2 feet with *Carsicum fruitescens* while the maximum was 6 feet with *Cajanus indicus*.

5. *Stump planting.*—This method of raising sandal has some advantages over the others. *Mandelia suberosa* and various other hosts are being tried.

The dumping method has been found to work satisfactorily in raising timber and fuel species such as *Albizzias, Acacias, Cedrela Toona, Schleichera trijuga* and some *Terminalias;* in many cases the period of germination has been reduced by half.

Aeration of the soil round sandal seedlings is of the greatest importance in assisting growth.

64. Experiments in lac cultivation were continued at Jowalagiri and Deverbetta. At Deverbetta the total quantity of yield obtained from the 3 crops was 2,788 lb. from 510 lb. used. It is observed that the monsoon crop is better than the pre-monsoon or post-monsoon crop and that the pre-monsoon crop is better than the post-monsoon crop, the latter being subject to parasitic attacks and weakened by prolonged hot weather. At Jowlagiri the total quantity of yield obtained from the three crops was 818 lb. from 150 lb. used. It is observed that the yield in the monsoon crop was good being nine times the brood used, but in the pre-monsoon crop though it was seven and a half times the brood used, only 27 lb. was utilized as the major portion of the yield (150 lb.) was said to contain predators. The post-monsoon crop was low due to predator attack and the severe hot weather, 70 lb. yielding only 116 lb. *Schleichera trijuga* brood on *Schleichera trijuga* was quite successful; *Schleichera* brood on *Zizyphus jujuba* was also good—20 lb. of brood lac yielded 45 lb. in Noganur reserve. Development was fair but predator attacks continued very heavy in spite of hand picking. At Deverbetta 6 lb. of *Schleichera* brood obtained from the pre-monsoon crop yielded on only one *Zizyphus* tree a good harvest of 55 lb., i.e., nine times the seed used. In this case the encrustation obtained was very good, thick and continuous. *Zizyphus jujuba* brood on *Zizyphus jujuba* was also successful. *Shorea* brood on *Acacia sundra* yielded good results in Denkanikota reserved forest. Nine pounds of *Shorea* brood resulted in the yield of 45 lb., i.e., five times the seed used In some cases the encrustation obtained was much thicker than on *Shorea. Shorea* brood put on *Dichrostachys cinerea* was also successful.

In *Central Salem* lac operations are being continued In the monsoon crop 25 lb. of brood lac put on 28 *Shorea talura* trees yielded 37 lb. brood lac; the crop had been heavily attacked by predators and parasites.

65. *Spike disease of sandal.*—Spike is spreading in the Yelagiris, but has not been noticed elsewhere in the *Vellore* division.

No spike is reported from *Central Salem* or *Chittoor*. In *South Salem* spike is still spreading in the Kollimalais and Pachamalais. In *North Salem* field observations and experiments in connexion with spike investigation were continued during the year. The results are as usual recorded in the proceedings of the periodical conferences held at the Indian Institute of Science, Bangalore. No startling discoveries have been made since the last report, but efforts are being made to discover a means of raising sandal resistant to infection. There are indications that leguminous hosts such as *Acacias*, *Albizzias*, etc., render sandal plants more susceptible to infection whereas some other host plants notably *Dodonia viscosa*, *Melia indica*, *Semecarpus anacardium*, appear to impart immunity. It is interesting to note that sandal parasitic on *Feronia Elephantum* has in many cases resisted the disease in heavily spiked areas.

CHAPTER VII.—ADMINISTRATION.

66. Mr. T. Clear held charge of the Circle throughout the year.

Changes in the territorial jurisdiction.—The bifurcation of the *Vellore* division referred to in the last year's report has since been ordered by the Government to be deferred owing to financial stringency. The administration of the *Vellore* and *Central Salem* divisions cannot be satisfactory until the former is bifurcated and the latter is rendered lighter by regrouping and redistributing some of the reserves among other divisions. The bifurcation of the vast and unwieldy range, Odugathur, in *Vellore* division though approved by the Chief Conservator has to be deferred as it was not considered expedient to split it up unless and until the Vellore division is bifurcated.

67. *Tours.*—The Conservator toured in all the divisions of the Circle spending more than six months in camp, and issued inspection notes on the forests of *Central Salem* and *South Salem* during the year and on the forests of *Vellore* and *North Salem* after the close of the year. All the District Forest Officers spent more than the prescribed minimum in camp.

68. *Inspections.*—The Conservator inspected all the District Forest offices in the Circle and the result was on the whole satisfactory. The District Forest Officers inspected all the Range offices during the year.

69. *Sandalwood depots.*—Both the sale depots at Tirupattur and Vellore were inspected by the District Forest Officer and the result of the inspections was satisfactory. All the forest depots in *North*, *Central* and *South Salem* divisions were inspected by the respective District Forest Officers.

Timber depots.—The four timber depots in *North Salem* were inspected by the District Forest Officer during the year.

70. *Audit.*—The audit staff of the Accountant-General's office inspected the accounts of all the District Forest offices. The result of inspection was reported to be satisfactory.

71. *Vernacular Training School.*—No school was held in the Circle during the year. One forest guard from *Chittoor* and two forest guards from *Central Salem* divisions were however deputed to the school held at Sappal, Palghat division, in the Sixth Circle.

Madras Forest College.—No students were deputed during the year.

72. *Health of establishment and sanitation—Chittoor.*—The health of the establishment in Mamandur range, Chittoor division, was as usual bad till August 1930 when Government sanction was obtained for a rural medical practitioner of Renigunta to visit Mamandur once a week to treat subordinates and villagers who happened to be ill and active measures for the destruction of mosquitoes were undertaken under the Chief Conservator's sanction. From August onwards matters began to improve and the number of people suffering from malaria gradually decreased till by the end of March 1931 there were only a few cases needing treatment. Anti-malarial measures are still being continued vigorously, and a further improvement in general health in the locality is confidently anticipated. *Vellore.*—The health of the executive staff was particularly bad and malaria was very virulent in the Javadis, following an unusually heavy north-east monsoon. There is no much scope in this division to give relief to subordinates by transferring them from malarial to non-malarial areas as practically the whole forest area is intensely malarious. *Central Salem.*—The Chitteris, the Attur Kalroyans and the Shevaroys North and South ranges are generally malarious. Guinea worm is very prevalent on the hills, especially during the hot weather; step-wells are considered responsible for this; the remedy lies with the District Board in the construction of draw-wells as in the Javadis. In *South Salem*, the health of the subordinates working in the Kollimalais and Pachamalais continued to be very unsatisfactory.

Last year the question of anti-malarial measures in the Kollimalais was raised in consultation with the Director of Fisheries with a view to the introduction of larvicidal fish in the hill streams to free the water from malarial parasites if possible. The preliminary catch was not successful as the mesh of the nets used was not fine enough. The Inspector of Fisheries, Nilgiris, paid a visit to the hills. It was found that there were no larvicidal fish of importance in the waters at present but conditions were considered

to be favourable for the introduction of certain varieties. The subject is under correspondence with the Director of Fisheries. It is to be hoped that the experiment will prove successful.

73. *Casualties.*—In *Chittoor*, one forester and one forest guard died of malaria. *In* Vellore, one forester, one forest guard and one range peon died of malaria and one range clerk committed suicide. In *North Salem*, one range clerk died from tuberculosis. In *Central Salem*, one forest guard and one watcher died of malaria. In *South Salem*, one watcher died of malaria.

CHAPTER VIII.—GENERAL.

1. Formation of and Management by Panchayats.

(To include Forest Village System.)

74. No reserved forests were transferred to panchayat management during the year. A portion of Karapet reserve in *Chittoor*, and an area of 720 acres in Mallur reserved forest in *South Salem* were retransferred to the control of the Forest Department during the year.

75. Forest Village system (Class II panchayat).—Nil.

2. Measures for improving Local Supplies and Facilities for obtaining Forest produce, Water-supply, Fuel, Manure Leaves, etc.

76. (*a*) *Improvement of water-supply in State forests.*—A trial boring was made at Nellivasal on the Javadis in *Vellore* but after going down 34 feet rock was struck and the boring had to be abandoned without water being found.

77. (ii) *Improvements of water-supply in grazing grounds.*—Grazing of cattle on a single range permit has largely removed the difficulties experienced in watering cattle in grazing grounds. Rupees 33 was spent in *Chittoor*, Rs. 145 in *Vellore* and Rs. 30 in *Central Salem* for improving water facilities in grazing grounds. There was no necessity for expenditure in other divisions owing to heavy rains during the year.

78. (*b*) *The supply of forest produce to meet the wants of the public.*—The wants of the public were generally met by contractors to whom fuel, bamboo and timber coupes as well as minor forest

produce farms were leased by opening depots in suitable centres. The requirements of the villagers in *North Salem* were generally met from unreserves, mitta forest, and forest under panchayat management.

79. (c) *Supply of manure leaves.*—In *Chittoor*, nine manure-leaf felling series are provided in the revised working plan. Each series is divided into three annual coupes and one coupe in each series is leased out annually. In *Vellore*, removal of specified species on payment of seigniorage was allowed during the year from reserved forest in Odugattur range and proposals for the removal of manure leaves from reserves which are not worked for sandal, timber or fuel were submitted to the Chief Conservator; Government sanction is awaited. In *Central Salem*, the demand was mostly met from unreserves and private forests as well as " Dainchia " (*Sesbania aculeata*) grown on private holdings on a small scale. With reference to G.O. Mis. No. 2268, dated 20th December 1929, opening reserved forests in the Attur range for the supply of leaf manure to the adjoining villages for wet cultivation, arrangements were made for the formation of coupes to be sold in 1931–32. In *South Salem*, the usual supply of manure leaves under the coupe system continued during the year. In *North Salem* there is no need to supply the green manure leaves from reserved forests as most of the lands are under dry cultivation. The few villagers cultivating wet lands grow most of their own manure crop in their fields, obtaining the balance required from unreserves.

80. (d) *Removal of thatch and fodder grass by the public.*—On the recommendations of the Royal Commission of Agriculture in India, the Conservator issued a circular forbidding the inclusion of grass in the list of minor forest produce sold to the public in order to allow free removal from the reserved forest by the public. In *Chittoor* and *Vellore* free removal of thatch grass was permitted as usual from all reserves including fuel coupes closed to grazing. This concession was largely utilized by the public. Grass in Banavaram reserve and Chennur plantation in *Vellore* was leased out to the Military Grass Farms Department on the usual royalty of Rs. 2 per ton.

3. Timber and Sandalwood Transit Rules.

81. (i) *Timber Transit Rules.*—These are in force only in *Chittoor* division where they are working satisfactorily. The necessity for introducing the rule in the other divisions, particularly the *three Salems*, is engaging the Conservator's attention.

(ii) *Sandalwood Transit Rules.*—The rules approved by Government are in force, but as they are not as effective as they should be, proposals for revising them have been submitted to the Chief Conservator.

4. Jungle Tribes.

82. The " Hill Village system " continued in force in the hill villages on the Javadis in *Vellore* division, and in the Chitteries in *Central Salem* division. Refunds of grazing fees for the successful protection of reserved forests and maintenance of reserve boundary lines under this system and special rewards for protection of reserves from fire made by the respective District Forest Officers in open darbars convened for the purpose according to the degree of protection afforded. In *Central Salem*, it is reported that the system has not worked satisfactorily during the year in three out of the eight reserves under the " Hill Village system." As a result of bad protection the refund of grazing fee was withheld and the Malayalis have been warned that they may be deprived of the privileges hitherto enjoyed by them and that they will have to purchase permits at 9 annas per cow-unit prevailing in the plains instead of at 2 annas per cow-unit now paid by them and refunded. Similar bad protection on the part of the villagers of Kuthimadavu was noticed in respect of Kuthimadavu reserved forest on the Salem Kalrayans and they were dealt with similarly. In *South Salem* the co-operation of the Malayalis was enlisted under the fire reward system under which they supply labour for departmental works on the hills, and protect the forests against fires. At the time of Conservator's last visit to the Pachamalais during 1930 a deputation of Malayalis asked for extra rights of way in addition to those provided at settlement. As a result of their request three new footpaths in Turaiyur range have since been opened. There have been no further grievances since then except poverty which seems to be chronic in the Pachamalais. The Labour department has held an enquiry in this matter. It was suggested by the Conservator to introduce fruit species from the Kollimalais to ameliorate their condition, but this had to be postponed owing to the present financial position.

The Malayalis form the chief source of labour for all departmental works on the hills. Deserving Malayalis continued to be employed as foresters, forest guards and watchers. In *Vellore*, the elementary schools at Komatteyeri, Veerappanur, Nadanur and Kuttattur are working well. The co-operative society and dispensary intended for Komatteyeri have not yet been started as contemplated last year.

5. Mining and Quarrying.

83. *Mining.*—In *Vellore* a licence to prospect for pyrites over 2 square miles in Periamalai reserved forest was granted to Mr. H. A. Golwynne, Madras. In the mining lease of Kurumbapatti reserved forest in *Central Salem*, the lessee did very little work up to 1st June, and he subsequently stopped the work altogether.

84. *Quarrying—Chittoor.*—The stone quarry in Amburdrug was not leased during the year for want of demand. Permission was granted for quarrying on seigniorage rates elsewhere. *Vellore.*—Banavaram quarry was leased out during the year. The lease of Avarampalaiyam quarry continued during the year. Local fund contractors were allowed to remove road metal on payment of seigniorage fees. *Central Salem.*—The quarrying of metal was permitted in Anandavadi reserved forest on payment of seigniorage value for road repairs. Free removal of 4,150 cubic feet of metal from Sanniyasimalai reserved forest for metalling feeder roads on the Shevaroys by a Public Works Department contractor prior to the receipt of G.O. Press No. 780, Development, dated 5th April 1930, was permitted. *South Salem.*—Small quarries in reserves and unreserves are leased out annually by auction sales to meet the local demand. Royalty was charged for other departmental works irrespective of the agency of collection. The concession of free quarrying hitherto allowed to local bodies and other departments of Government has now been withdrawn.

6. Live-stock.

85. *Elephants.*—Nil.

Other animals.—In *Chittoor* division one bull was maintained by the department for watering the plants in the Whiteside's garden reserved forest and the forest rest-house compound at Palmaner.

7. Civil Suits.

86. *Chittoor.*—The result of the appeal preferred by the Zamindar of Bangarupalaiyam is not yet known. *Vellore.*—Khaji Syed Yusuff Sahib of Chowlur referred to in the last year's report, filed a civil suit in the Sub-Court, Vellore, on 17th July 1930 claiming mandatory injunction to register his property mark. The defence of the suit was undertaken by the Collector under the sanction of the Chief Conservator. The case was posted to 25th March 1931 for trial and then adjourned to 25th June 1931. *North Salem.*—The civil suit of 1929 referred to in the last year's report

for compensation of Rs. 600 was disposed of by the District Munsif, Krishnagiri, who awarded the plaintiff a sum of Rs. 1-7-0 as the value of five pieces of sandal sapwood at firewood rates. *South Salem.*—Three suits were pending disposal during the last year—two in the District Court, Trichinopoly, and one with the District Munsif, Kulittalai. The suits in the Trichinopoly District Court were dismissed with costs. That of the execution petition of the Kulittalai suit was decided in favour of the Government.

8. Control of Unreserved Lands by the Forest Department.

87. *Vellore*:—The land revenue administration of the Javadi hill villages of Tirupattur taluk has been under the control of the Forest Department for the last thirteen years and its continuance for another year was sanctioned in G.O. No. 2164, Development, dated 5th December 1930. Proposals to extend the land revenue administration throughout the Javadis have been submitted and their sanction is pending the bifurcation of the division. *North Salem.*—The Forest Department exercised partial control over unreserves for the extraction of sandalwood. *Central Salem.*—Unreserved lands remained under the control of the Revenue Department as usual except the Kolagur Kanapadi unreserves which were leased out for bamboo (*Bambusa arundinacea*), avaram (*Cassia auriculata*), and vembadam (*Ventilago madraspatana*) barks and etti (*Strychnos nux vomica*) seed by the Forest Department under the orders of the Collector of Salem. *South Salem.*—The unreserves of the Pachamalais and Kollimalais continued to remain under the partial control of the Forest Department in the matter of—

(i) regulating ponakkad cultivation;
(ii) protection and extraction of sandalwood; and
(iii) leasing out minor produce.

88. The relationship between the Forest and Revenue Departments continued friendly.

Enclosure.

AN ACCOUNT OF THE OPERATIONS AND RESULTS IN EACH FOREST DISTRICT OF THE FOURTH CIRCLE DURING 1930-31.

Chittoor Division.

Description.—This division covers portions of the Revenue districts of Chittoor and North Arcot and its elevation varies from about 500 feet to 3,784 feet above sea level. The forests are of a dry deciduous scrub

type for the most part except in Mamandur and Chamala valleys where timber of valuable species is common. In the Palmaner range, which is a continuation of the Mysore plateau, sandal is found in varying proportions although it is young and immature.

2. *Area.*—The aggregate area of the reserved forests in the division is 786 square miles. Of this, 578 square miles are under the management of the Forest Department and the 208 square miles under the control of panchayats.

3. *How the forest division is split up into subordinate administrative charges—*

Ranges.	Number of beats.
1. Chandragiri	9
2. Chamala	10
3. Mamandur	9
4. Palmaner	15
5. Gudiyattam	16
Total ...	59

A staff of 15 foresters, 59 forest guards and 61 watchers helps the five range officers in the protection of reserves and in the execution of works.

4. *Cost of administration—Pay—*

	RS.
District Forest Officer	14,382
Executive, protective and clerical staff	40,838
Allowances—	
Non-voted	1,777
Voted	6,229
Total ...	63,226

5. *Cost under other important heads—*

	RS.
Exploitation	1,065
Improvement and upkeep of forest	21,199
Miscellaneous	3,781
Total ...	26,045

6. *Income from main sources—*

	Rs.
Sandalwood	348
Timber	8,874
Fuel	14,537
Bamboos	15,245
Grazing	24,303
Minor forest produce	16,742
Miscellaneous including drift and waifwood ...	10,837
Total ...	90,886
Deduct refunds	174
Net income ...	90,712

7. *Chief works done in the division.*—Extraction of red sanders (*Pterocarpus santalinum*) and jalarai (*Shorea Talura*) timber from Chamala and Talakona reserves.

The construction and repair of forest roads, buildings and wells.

Introduction of sandal in a systematic manner by establishing propagation centres.

Numerous experiments made to discover suitable species with which to stock dry forests and to test the quality of indigenous species for regeneration purposes.

8. The financial results of the year are given below:—

	Rs.
Total revenue	90,712
Total expenditure	89,271
Net profit ...	1,441

Vellore Division.

Description.—The division comprises the whole of the Javadi Hills of the Eastern Ghauts roughly 50 miles long and 30 miles broad with an elevation rising to above 3,200 feet and the northern fringe of the Kalroyans. The territorial jurisdiction of the division extends over most of South Arcot and Chingleput, in both of which districts however all the reserved forests have been transferred to the Revenue Department for panchayat management. The hill forests are mostly deciduous with patches of evergreen belts at higher elevations. Growth is mostly sandal and bamboos with the usual small timber and fuel species at the foot of the hills.

2. *Area.*—The total area of the reserved forests in the division is 1,116 square miles of which an area of 706 square miles is under the direct control of the Forest Department and the balance 410 square miles under the control of the Revenue Department.

3. *How the forest division is split up into subordinate administrative charges—*

Range.	Beats.	Sandalwood series.	Total.
1. Tiruppattur	9	4	13
2. Alangayam	8	1	9
3. Chengam	4	3	7
4. Tiruvannamalai	7	...	7
5. Polur	7	3	10
6. Santhavasal	9	3	12
7. Odugathur	29	...	29
Total ...	73	14	87

4. *Cost of administration—Pay—*

	RS.
District Forest Officer and his assistants ...	36,144
Executive, protective and clerical staff ...	59,702
Allowances—Non-voted	4,590
Do. Voted	9,582
Total ...	1,10,018

A staff of 30 foresters, 87 forest guards and 80 watchers helps seven Range Officers in the protection of reserves and in the execution of work.

5. *Cost under other important heads—*

	RS.
Exploitation	17,531
Improvement and upkeep of forest	35,978
Miscellaneous	8,316
Total ...	61,825

6. *Income from main sources—*

	RS.
Sandalwood	1,74,449
Timber	20,092
Fuel	57,581
Bamboos	71,916
Grazing	45,712
Minor forest produce	46,503
Miscellaneous including drift and waifwood ...	29,001
Total ...	4,45,254
Deduct refunds	7,028
Net Total ...	4,38,226

7. *The chief work done in the division.*—The marketing of sandalwood, fuel, bamboos and minor forest produce.

The construction and repairs of forest roads, buildings and wells.

Improvement of water facilities.

Protection and improvement of the forests in general.

The land revenue administration of some of the hill villages is a special feature of the Tiruppattur Javadis where the Forest Department assumed the function of the Revenue Department.

8. The financial results of the year are given below:—

	Rs.
Total revenue	4,38,226
Total expenditure	1,71,842
Net profit ...	2,66,384

North Salem Division.

Description.—Part of this division (which comprises the whole of Hosur and Krishnagiri taluks and part of the Dharmapuri taluk in the Salem Revenue district) covers a portion of the Mysore plateau which contains large areas of sandalwood forests. The lower areas towards Salem do not contain so much sandalwood, but timber species notably *Hardwickia binata* grow in large quantities, as also the commoner timber and fuel species found in the dry deciduous forests. Bamboos occur in all ranges except Krishnagiri.

2. *Area.*—The aggregate area of the division is 578 square miles of which 567 square miles are under the control of the Forest Department and 11 square miles under the control of the Revenue Department.

3. *How the forest division is split up into subordinate administrative charges—*

Range.	Beats.	Sandalwood series.	Total.
1. Denkanikota East ...	5	5	10
2. Denkanikota West ...	7	2	9
3. Anchetti	8	2	10
4. Dharmapuri	8	2	10
5. Krishnagiri	6	...	6
Total ...	34	11	45

A staff of 20 foresters, 52 forest guards and 46 watchers helps the five Range Officers in the protection of reserves and in the execution of works. Besides the above there is a research ranger with a supernumerary assistant employed on spike investigation work and the cultivation of lac. There is also an assistant entomologist deputed from the Forest Research Institute, Dehra Dun, to investigate the cause of spike disease in sandal.

4. *Cost of administration—Pay—*

	Rs.
District Forest Officer and his assistant ...	13,452
Executive, protective and clerical staff ...	43,551
Allowances—Non-voted	3,458
Do. Voted	9,747
Total ...	70,208

5. *Cost under other important heads—*

	Rs.
Exploitation	18,168
Improvement and upkeep of forest	35,209
Miscellaneous	7,796
Total ...	61,173

6. *Income from main sources—*

	Rs.
Sandalwood	78,544
Timber	5,378
Fuel	6,664
Bamboos	5,937
Grazing	29,374
Minor forest produce	18,299
Miscellaneous including drift and waifwood ...	9,029
Total ...	1,53,225
Deduct refunds	242
Net Revenue ...	1,52,983

7. *The chief work done in the division.*—The extraction of sandalwood is the chief work done in the division.

The construction and repair of roads, buildings and wells.

Research work in collaboration with the Indian Institute of Science, Bangalore, and the Forest Entomologist, Dehra Dun, is being carried out in order to discover the cause of spike in sandalwood.

Lac cultivation which was started on an experimental measure has developed during the year to an appreciable extent.

8. The financial results of the year are given below:—

	Rs.
Total revenue	1,52,983
Total expenditure	1,31,381
Net Revenue ...	21,602

Central Salem Division.

Description.—This forest division covers the Shevaroys in the centre and the Kalroyan Hills in the north, the north-eastern part of the latter being known as the Chitteris. The southern and western part of the division consists of undulating ground. The higher elevations contain small timber, bamboos and sandal in fair quantities. Sandal is now spreading throughout the division except in Cauvery range.

2. *Areas.*—The aggregate area of the reserved forests in the division is 943 square miles, of which 230 square miles are under the control of the Revenue Department and 713 square miles under the control of the Forest Department. An area of 1·19 square miles was disreserved during the year.

3. *How the forest division is split up into subordinate administrative charges—*

Ranges.	Beats.
1. Atur	21
2. Harur	19
3. Shevaroys South	11
4. Shevaroys North	8
5. Cauvery	11
Total ...	70

A staff of 16 foresters, 75 forest guards and 70 watchers helps the Range Officers in the protection of reserves and in the execution of works.

4. *Cost of administration—Pay—*

	Rs.
District Forest Officer	8,862
Executive, protective and clerical staff ...	44,440
Allowances—Non-voted	322
Allowances—Voted	6,995
Total ...	60,619

5. *Cost under other important heads—*

	Rs.
Exploitation	2,225
Improvement and upkeep of forests	22,757
Miscellaneous	5,038
Total ...	30,020

6. *Income from main sources—*

	Rs.
Sandalwood	6,127
Timber	12,058
Fuel	30,460
Bamboos	15,220
Grazing	61,666
Minor forest produce	20,951
Miscellaneous including drift and waifwood ...	24,924
Total	1,71,406
Deduct refunds	1,478
Net revenue ...	1,69,928

7. *The chief work done in the division.*—The work is mainly control of grazing and supply of fuel to Salem town, and the construction and repair of forest roads, buildings and wells. A limited quantity of sandalwood is extracted.

Timber trees in Harur and Shevaroys South ranges were sold during the year standing to contractors.

8. The financial results of the year are given below:—

	Rs.
Total revenue	1,69,928
Total expenditure	90,639
Net profit ...	79,289

South Salem Division.

Description.—The division comprises three main ranges of hills, namely, the Bodamalais, the Kollimalais of Salem and Pachamalais of Salem and Trichinopoly districts—all isolated hill ranges reaching in some places an elevation of 4,000 feet. The higher slope contains semi-evergreen forests with occasional sholas. Sandalwood is common on the plateau and along with streams and slopes up to about 2,500 feet. Small timber and fuel species notably *Albizzia amara* occur throughout the lower slopes.

2. *Area.*—The aggregate area of the reserved forests in the division is 411 square miles, of which 256 square miles are under the control of the Forest Department and 155 square miles under the control of the Revenue Department.

3. *How the division is split up into subordinate administrative charges—*

Ranges.	Beats.
1. Namakkal	9
2. Rasipur	9
3. Thammampatti	12
4. Turaiyur	12
Total ...	42

A staff of 18 foresters, 49 forest guards and 44 watchers helps the four Range Officers in the protection of reserves and in the execution of works.

4. *Cost of administration—Pay—*

	Rs.
District Forest Officer and his assistant ...	12,998
Executive, protective and clerical staff ...	33,435
Allowances—Voted	8,257
Total ...	54,690

5. *Cost under other important heads—*

	Rs.
Exploitation	3,319
Improvement and upkeep of forests	17,806
Miscellaneous	4,360
Total ...	25,485

6. *Income from main sources—*

	Rs.
Sandalwood	8,233
Timber	25,813
Firewood and charcoal	8,054
Bamboos	5,516
Grazing	23,061
Minor forest produce	29,984
Miscellaneous including drift and waifwood.	14,054
Total ...	1,14,715
Deduct refunds ...	— 189
Net revenue ...	1,14,904

7. *The chief work done in the division.*—Control of grazing, supply of fuel, leaf manure, and minor forest produce form the chief work carried out during the year; also the construction and repair of forest roads, buildings and wells. A limited quantity of sandalwood was also extracted.

8. The financial results of the year are given below:—

	Rs.
Total revenue	1,14,904
Total expenditure	80,174
Net profit ...	34,730

SALEM,
29*th August* 1931.

T. CLEAR,
Conservator of Forests, Fourth Circle.

ANNUAL ADMINISTRATION REPORT OF THE FOREST DEPARTMENT

FOR THE

YEAR ENDING 31ST MARCH 1931.

FIFTH CIRCLE

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

ALTERATION IN AREA.

Reserved forests.—The total area of reserved forests at the close of the year was 3,320 square miles against 3,321 square miles at its commencement, the difference being due in *Madura* to the disreservation of 312·75 acres in the Kuppuvamadai reserve for assignment to the depressed classes for cultivation and 21 acres in Karumalai reserve for excluding a path and a pen used by the villagers.

The disreservation of the Honnametti estate referred to in the last year's report is still awaiting the sanction of Government.

2. *Reserved lands.*—An extent of 6·63 acres—site occupied by the forest buildings in Kuttalam reserved forest in *Tinnevelly*—was notified under section 4 of the Forest Act.

3. *Forest settlement.*—The settlement of the small block referred to in the previous paragraph is pending with the Forest Settlement Officer, Tinnevelly.

DEMARCATION.

4. Twelve miles of enclosure boundary in *Kollegal*, 17 miles of reserve boundary in *North Coimbatore* and 17 miles of disreserved areas and enclosure boundaries in *Madura* were permanently demarcated at a cost of Rs. 2,516. A sum of Rs. 17 was spent in *Kollegal* on verifying the boundary of enclosures prior

to permanent demarcation, and Rs. 16 in *North Coimbatore* on preliminary demarcation prior to reservation. Fourteen miles of boundary between the reserves and frontier boundary and private forests in *South Coimbatore* were re-cleared at a cost of Rs. 219. Rupees 40 was spent in the same district by the Mount Stuart Commercial Concern on re-clearing the interior boundary between two ranges. Rupees 222 spent in *Madura* on demarcating the area disreserved for a dairy farm were recovered from the party concerned. The common boundary between the reserved forest and the Kattalamalai estate in *Tinnevelly* was cleared to a length of two miles but the work was not paid for during 1930–31. Two thousand two hundred and seventy-five miles of boundary lines elsewhere in all the divisions were maintained free of cost by the subordinates.

Forest Surveys.

5. (*a*) *By the Survey of India party.*—Nil.

6. (*b*) *Local Surveys.*—A sum of Rs. 30 was spent in *Kollegal* on survey of an area proposed to be disreserved round an enclosure. The survey of coupes and regeneration areas was, as usual, done by the subordinates. The Madras Survey Party No. V, Cannanore, has undertaken the survey of the area on the Anamalais, disreserved for cultivation of plantation products. The work was commenced in January 1931 but is not yet complete.

7. Reference maps were maintained in all the districts and posted to end of March 1931.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

Preparation and control of working plans.

(*a*) Preparation.

8. No new working plan was sanctioned during the year. Out of 3,228 square miles of reserves under departmental control in the whole Circle, an area of 530 square miles is covered by sanctioned working plans; 1,503 square miles by schemes temporarily sanctioned by the Conservator, and 212 square miles by lapsed working plan for extraction of dead sandalwood trees in North Coimbatore.

The preparation of a working plan in *North Coimbatore* and in *Kollegal* is still under progress under the control of the Working Plans Conservator. The revision of the plan for the Mount Stuart forests in *South Coimbatore* by the Working Plans Conservator was completed during the year and is awaiting the sanction of the Chief Conservator. A scheme for working the Villony valley in Pollachi range for timber is under consideration, but is not likely to be taken up until the market conditions for timber can improve. In the meanwhile, an investigation of the exploitable stock has been made and an alignment and estimate for a cart-track have been completed.

A start has been made to revise part I of the sanctioned working plans in *Madura* and also to collect statistics for preparation of part I for areas not covered by working plans. A working plan for the pine plantations of Kodaikanal range has been drawn up and is now pending with the District Forest Officer for submission to the Conservator finally.

Tinnevelly.—Part I for a revised working plan for the entire area of all the deciduous forests of the division was prepared by the District Forest Officer but had to be returned to him for revision in the light of certain remarks made on it and it is now pending with the District Forest Officer.

As a preliminary to the preparation of a working plan for the evergreen forests of the division, a stock map was prepared after the close of the year under report, by the Extra Assistant Conservator of Forests placed on special duty for that work.

(*b*) Control.

9. The prescriptions of the existing working plans and schemes were generally followed except in the following cases:—

Kollegal.—Removal of dry fuel was allowed from old coupes of Araipalaiyam to meet local demand. A fuel coupe at Ellamalam was also worked in addition as an experimental measure.

North Coimbatore.—Felling in five fuel series was behindhand due to lack of demand, and improvement fellings in Kallar and Jackanari working circles were not carried out being found unnecessary.

South Coimbatore.—Slight deviations as regards the discontinuance of fire-protection in Udamalpet range, discontinuance of burning lantana in Punachi range and the working of Coupes 5 and 7 of Punachi timber working circle were sanctioned by the Chief Conservator.

Madura.—Felling in three fuel coupes was done under the simple coppice system instead of coppice with standards. The annual allocation of coupes in two series has been re-arranged. These deviations were approved by the Chief Conservator.

Tinnevelly.—Felling in two fuel coupes was done under the system of simple coppice instead of coppice with standards under proper sanction.

2. Communications and Buildings.

(a) *Roads and bridges.*

10. The expenditure on ' new works ' was Rs. 10,428 against Rs. 18,552 in the previous year. The increase in 1929–30 was chiefly in *South Coimbatore* and *Madura*, due to undertaking three fair-weather roads for extraction of timber in the former district and one in the latter district for extraction of fuel.

The chief works undertaken were—

	Rs.
Kollegal—	
Bridlepath from Uthapium to Madeswaranmalai (2 miles 4 furlongs)	747
Road leading from the old Cowdally-Ponnachi road to Ponnachi rest-house (6 furlongs)	306
Irish bridge at the Muskattyhalla on the Lokanahalli-Bailur road	850
Total ...	1,903
South Coimbatore—	
Fair-weather road from Tunnacadavu Ar to Sungam (2 miles 4 furlongs)	6,021
Extension of Nallar cart-track	49
Total ...	6,070
Madura—	
Extension of Mulayur road—Compensation for land taken up	430
Construction of Sirumalai-Konapatti road (2 miles)	397
Total ...	827

Tinnevelly—

	RS.
Metalling Kalakad-Sivanaperi road up to reserve boundary (6 furlongs) and construction of two culverts	1,628

At the end of the year there were 154 roads and bridle-paths including culverts aggregating a distance of 773 miles built at a cost of Rs. 6,00,375.

11. *Maintenance.*—Expenditure on the repair of 86 roads and bridle-paths aggregating a distance of 542 miles amounted to Rs. 58,261 against 593 miles at a cost of Rs. 44,931 in the previous year. The increase was in *Kollegal* and *South Coimbatore* due to extensive repairs to the ghaut roads to make them fit for heavy traffic throughout the year. The following statement shows the roads maintained both by the Forest and Local Fund Departments and the amount of contribution paid by the latter :—

Districts.	Distance repaired.	Amount spent.	Contribution due.	Amount of contribution paid in 1930-31.	Balance.
	MILES.	RS.	RS.	RS.	RS.
Kollegal	49	7,029	2,608	..	2,608
Coimbatore, North	57	6,693	3,668	1,345	2,323 *
,, South	14	8,846	3,600	..	3,600
Madura	103	6,984	4,369	4,369	..
Total ..	223	29,552	14,245	5,714	8,531

* Collected after the close of the year.

The condition of the roads is reported to be generally satisfactory.

(*b*) *Buildings.*

12. The expenditure on ' new works ' and improvements was Rs. 15,826 against Rs. 9,386 in the previous year, due chiefly in *Kollegal, North Coimbatore* and *South Coimbatore* to greater number of buildings put up than in the previous year. The chief works executed were—

Kollegal.

	RS.
Subordinates' lines at Chengadi	1,205
Do. Saggiam	1,242
Do. Bandalli	1,211
Do. Kothanur	4,638
Sandalwood godown at Thamarakarai ...	696
Total ...	8,992

North Coimbatore.

	Rs.
Clean-chipping shed at Satyamangalam ...	1,457
Improving the subordinates' lines at Geddesal and Hassanur	252
Improving the subordinates' rest-houses ...	76
Total ...	1,785

South Coimbatore.

Completion of the subordinates' lines at Karattur	233
Subordinates' lines at Manupatti	2,288
Ceiling the Range Officer's quarters, etc., at Waterfall	523
Value of timber adjusted for constructing a bazaar at Top Slip	165
Total ...	3,209

Madura.

Improving the subordinates' lines at Kukkal	77
Improving the rest-house at Virupakshi ...	75
Improving the range quarters at Cumbum ...	589
Conversion of two stables at Kalpatti in the subordinates' lines	330
Forester's quarters at Manaparai	745
Improvement to the rest-house at Greenhut ...	24
Total ...	1,840

Subordinates' lines at Kombu valued at Rs. 1,040 were dismantled during the year and the double kraal at Lower Punachi valued at Rs. 549 written off being old and unserviceable. Rest-house at Chinnasurli valued at Rs. 1,225 was sold as being not useful to the department and the subordinates' lines at Kalpatti written off. Subordinates' lines at Mavathur valued at Rs. 940 were dismantled as unsafe for occupation. Rest-house at Sirumugai valued at Rs. 550 was transferred to the Revenue Department.

13. There were 405 buildings at the close of the year valued at Rs. 5,57,118 and their cost of maintenance was Rs. 12,426; roughly two per cent of the capital cost.

The condition of the buildings was reported to be fairly satisfactory at the close of the year.

(c) *Miscellaneous.*

14. The expenditure on new works and on repairs were Rupees 1,475 and Rs. 1,744 respectively against Rs. 161 and Rs. 915 in the previous year.

The chief items of new works were :—

	RS.
Construction of an open channel for the supply of water to the rest-house at Geddesal	437
Deepening a well at Ponnachi	15
Extension of the telephone line from Anaipadi to Sungam (2 miles 3 furlongs)	534
Construction of a well at Vannathiparai ...	489
Total ...	1,475

Expenditure on maintenance consisted of repairs to existing wells and maintenance of the existing telephone line. A telephone linesman was employed in *South Coimbatore* throughout the year at a cost of Rs. 504.

There were 93 wells, one telephone line and an open channel representing a capital expenditure of Rs. 28,985 at the close of the year. Twenty-seven wells were repaired at a cost of Rs. 410 and a telephone line maintained at a cost of Rs. 256.

3. Protection of Forests.

(a) *General protection.*

15. The following statement shows the offences registered during the year as compared with the previous year :—

Offences relating to reserves dealt with by Forest Officers—

	1930-31	1929-30
	RS.	RS.
(1) Injury to forests by fire	238	174
(2) Unauthorized fellings	2,335	2,398
(3) Unauthorized grazing	583	533
(4) Other offences	113	102
Total ...	3,269	3,207

The figures show an increase under all items except (2) which shows a slight decrease. Under injury to forests by fire, the increase was chiefly in *Kollegal* and *Madura* attributed to graziers. The

suggestion to close areas to grazing on account of extensive fires in two sections was turned down by the Collector, in one instance as there were not sufficient areas to meet the grazing needs, and in another instance the closure, it was thought, would cause bitter discontent. The increase under unauthorized grazing was noticeable in *Kollegal*, *North Coimbatore* and *Madura*. In *Kollegal*, it was due to greater vigilance on the part of the protective staff in booking offences in closed areas. In *North Coimbatore*, a surprise inspection by the Range Officer, Bhavani, and his subordinates resulted in the detection of 34 cases involving 1,722 head of cattle. *South Coimbatore* shows an increase of ten cases under ' other offences.'

16. *Cases old and new dealt with during the year.*—Of the 2,006 cases taken into court including the old ones, 706 ended in conviction, 883 in acquittal, leaving a balance of 417 pending with magistrates at the close of the year. Of the 883 acquittals, 30 were acquitted after trial, 851 treated as acquittals as compounding fees were paid, and two withdrawn. Rupees 8,070 were collected as compounding fees in court. Punishments awarded by magistrates are reported to be adequate in *North Coimbatore* and *Madura*. In *Kollegal*, out of 33 cases taken into court, 23 were tried in Kollegal taluk and 10 in Bhavani. In the former, 12 cases ended in acquittal, i.e., 52 per cent which was very unusual. In Bhavani all cases ended in conviction. In *Madura* out of 1,302 cases taken into court 501 were convicted and 523 acquitted. Of these latter, 510 were acquitted on payment of compounding fees. The large number of cases in which the compounding fees were paid in court indicates a tendency on the part of the miscreants to draw the forest subordinates away from their beats unnecessarily and it is reported that this has been taken to the notice of the District Magistrate. Rupees 37,154 were realized as compounding fees against Rs. 42,525 in the previous year.

Offences relating to unreserves dealt with by Revenue officials.—The following statement shows the offences registered during the year and the previous year :—

	1930-31	1929-30
(i) Injury to forests by fires	5	17
(ii) Unauthorized fellings	993	1,228
(iii) Unauthorized grazing	38	20
(iv) Other offences	150	265
Total ...	1,186	1,530

During the year there was a decrease under all the heads except item (iii) where there was a slight increase. Of the 231 cases taken into court, 96 ended in conviction and 91 in acquittal.

17. The percentage of offences personally enquired into by the District Forest Officers and Range Officers is given below :—

Division.	Percentage.	
	District Forest Officer.	Range Officer.
Kollegal	13	13
Coimbatore, North	0·4	15
Do. South	...	13
Madura	0·3	6
Tinnevelly	2	7

18. *Rewards.*—An amount of Rs. 63 was distributed as rewards to two forest guards, two watchers and four private persons in two forest cases; one of which was a case of illicit hunting and the other of timber theft.

19. *Patrol.*—Suprise inspections and secret patrols were arranged in three divisions and the results were satisfactory. Eight such inspections were made in *Kollegal* resulting in detection of 20 cases involving 142 accused, and 75 inspections in *Tinnevelly* resulting in detection of over 31 cases involving 442 head-loads of fuel and 191 head of cattle. In *North Coimbatore* surprise inspections made by two Range Officers resulted in detection of cases, involving illicit removal of fuel, which were compounded for Rs. 202, and 34 grazing cases, involving 1,722 head of cattle, which were compounded for Rs. 1,981-8-0. The usual notice of warning to the public against setting fire to reserved forests was published in the District Gazettes.

Sandalwood cases.—In *North Coimbatore*, four sandalwood cases were detected, two ended in conviction and confiscation of the seized produce, and two were compounded for Rs. 35. In *Madura*, there were three petty cases of cutting sandalwood pieces. Of these, two were compounded and one ended in conviction and confiscation of the seized produce. A case of sandalwood theft was detected in *Tinnevelly* and compounded for Rs. 29.

(*b*) *Protection from fire* (*Calendar year* 1930).

20. *Special protection.*—The area attempted to be specially protected by a system of fire-lines and fire patrols was 248,894 acres against 264,847 acres in the previous year, and the cost of protection was Rs. 4,963 against Rs. 4,634 in the previous year. The increase was chiefly in *South Coimbatore* due to areas of teak plantations added annually, and to putting out accidental fires.

An area of 238,394 acres was successfully fire-protected during the year against 261,522 in the previous year, the percentage of success being 95 against 98 in the previous year.

21. *Kollegal.*—The sandal areas were specially protected by burning the grass from the outer edges, over an area of 17,984 acres at a cost of Rs. 457 and no fire occurred in this area. The Kollegal-Mysore frontier boundary was cleared and burnt over a distance of 19 miles at a cost of Rs. 190 and the taluk boundary over a distance of six miles at a cost of Rs. 55. A distance of 5½ miles round Ponnachi shola and 14 miles of path was cleared at a cost of Rs. 35.

North Coimbatore.—The sandal areas in Mettupalaiyam range were specially protected at a cost of Rs. 134, the system adopted being cutting and burning of grass and other growth in the fire-lines to a width of 30 feet. Elsewhere in the division early burning was done at a cost of Rs. 288 over an extent of 25,640 acres against 17,600 acres in the previous year. The grass areas round the sholas in the Minchiguli valley were also early burnt and the sholas protected from late fires.

South Coimbatore.—Besides the early-burning of grass around the sholas in the grass hills, the regeneration areas, timber depots and buildings in Tunacadavu and Punachi ranges were fire-protected at a cost of Rs. 1,777.

Madura.—Besides the fire-protection of the pine plantations and the Ampthill downs, the Surli plateau under the Surli scheme was also brought under special protection. The result may be said to be satisfactory on the whole except in the southern slopes and Perumal-malai in Kodaikanal range. Action has been taken to close the latter reserve to grazing for two years.

Tinnevelly.—The system of fire-protection by fire patrols was continued and the cost of employment of fire patrols amounted to Rs. 381. Early-burning is not followed in this division.

22. *General protection.*—The area under general protection was 1,637,667 acres against 1,623,452 in the previous year, and the area burnt 68,479 acres against 47,456 in the previous year. The number and origin of fires are compared in Appendix A.

The worst fires occurred in the Thattavadi and Minchiguli valleys where the sword grass grows to a height of 12 feet. No serious damage to tree growth has been reported. A new settlement has been opened at Minchiguli and it is hoped that fires will gradually diminish in this area.

23. The average cost of special and general protection was Rs. 9-14-10 and Rs. 8-11-0 per square mile attempted.

(c) *Protection against cattle.*

24. The total area closed to grazing was 641 square miles out of 3,228 square miles of reserved forests under departmental control, against 582 square miles in the previous year. Two square miles were closed to grazing for part of the year in *Tinnevelly* against 10 square miles in the previous year. The area opened to grazing for all animals, except goats, was 2,371 square miles against 2,478 square miles in the previous year. The difference was chiefly in Kollegal due to closures of agricultural implements and fuel coupes worked during the past five years. Nine square miles of reserves in *Tinnevelly* and 195 square miles in *Madura* were kept open for all animals except sheep and goats for part of the year. The number of animals licensed to graze on payment was 242,633 against 246,493 in the previous year. The decrease was generally in all divisions due to cattle mortality which has been ascertained. The number of cattle impounded was 9,454 against 7,389 in the previous year and 10,510 the average of three years ending with 1929–30; the increase was mainly in *North Coimbatore* due to 1,357 head of cattle being impounded by the Range Officer, Bhavani, on surprise inspections of reserves, and partly to less number of cattle rescued.

25. The following statement compares the revenue and incidence of grazing during the year under report with those of the previous year:—

Divisions.	Grazing revenue.		Difference.	Incidence: acres per cow unit.	
	1929–30.	1930–31.		1929–30.	1930–31.
	Rs.	Rs.	Rs.		
Kollegal	47,192	45,614	— 1,578	6	6
Coimbatore, North	37,823	37,483	— 340	8	7
,, South	4,830	4,634	— 196	12	12
Madura	26,964	24,478	— 2,486	8	9
Tinnevelly	7,442	8,426	+ 984	6	5
Total ..	1,24,251	1,20,635	— 3,616	..	..

(d) *Protection against injuries due to natural causes.*

26. Fresh attacks of ' spike ' were noticed near Bailur in *Kollegal* and no protective measures are known to arrest its progress. The sandal areas in divisions other than *Kollegal* and *North Coimbatore* continue to be spike-free.

27. *Weeds and climbers.*—Climber-cutting and weeding were done in the felled fuel coupes in *South Coimbatore* at a cost of

Rs. 691, climber-cutting in Coupes 9 and 16 of Punachi Working Plan at a cost of Rs. 99; and in the teak plantations wherever necessary.

Tinnevelly.—In *Tinnevelly*, climber-cutting in 6-year old coppice coupes was done at a cost of Rs. 206 in two ranges.

28. *Prickly-pear and lantana.*—Prickly-pear is being successfully got rid of in all the divisions through the agency of the cochineal insect. *Lantana* continues to spread in Punachi and Tunacadavu ranges of *South Coimbatore*. The burning down of lantana, which was done in some of the timber coupes of Punachi range (*South Coimbatore*) at a cost of Rs. 50, does not appear to have had the desired result. *Strobilanthes* is uprooted in *Tinnevelly* by contractors while working fuel coupes.

29. *Damage by animals.*—Elephants continue to do considerable damage to teak in Vannathiparai (*Madura*), in the Alagarkoil valley (*Tinnevelly*); and in some of the Mount Stuart plantations (*South Coimbatore*). In the last division, the damage was, to some extent, reduced by digging deep pits round the 1919–26 plantations. Sambhur and deer also do a great deal of damage to young teak in Kalakad and Mundanthorai (*Tinnevelly*).

30. *Damage by rain and floods.*—Heavy floods in the Bhavani caused some damage to the tree-growth in Mettupalaiyam range of *North Coimbatore* district.

CHAPTER III.—SYLVICULTURE.

SECTION I.—FORMATION AND REGENERATION.

(i) *General progress of areas under regeneration.*

31. *Kollegal.*—Operations for the propagation of sandal in portions of Doddasampagai, Madeswaranmalai, Chikkailur and Yedayarhalli reserves were continued, but with very indifferent results. Two experimental plots for raising sandal with cereal crops—ragi and dhal—were opened and 4,500 patches sown. An enumeration on 13th March 1931 showed that the number of patches containing sandal seedlings was only 2,041. A sum of Rs. 164 was spent up to date. The results are not encouraging. The coupes opened for the supply of agricultural implements to the rural population remained closed to grazing for five years from the date of their working, but in view of the fact that the coupes were seldom worked properly, owing chiefly to the absence of the class of timber required for the purpose, and as the closure of the area appeared most unjustified in the absence of any regeneration

fellings in them, the coupes were ordered to be thrown open to grazing as a result of the Conservator's inspection after the close of the year.

North Coimbatore.—Regeneration of sandal in all the sandal areas is reported to be fair. In the South Bargur reserve, sandal is said to be spreading southwards towards the slopes and the plains. Enumeration in the Palamalais showed the existence of 23,564 trees of different girth—classes and the locality, so far, has been free of ' spike ' disease. Regeneration of other species, such as *Dalbergia latifolia* and *Pterocarpus Marsupium*, is reported to be good in Thattavadi and the Minchiguli valley, while that of *Anogeissus latifolia*, *Chloroxylon Swietenia* and *Albizzia amara*, is said to be fair elsewhere in the division.

South Coimbatore.—The year was a good one for teak, vengai, karimarudu and pillamarudu, bad for rosewood and fair for other species. Natural regeneration of teak in Punachi range was not satisfactory, but of rosewood and vengai under mother trees was appreciable, and of rosewood by root suckers fair. Natural regeneration from seeds outside the felled coupes in Pollachi range was not so bad as that of last year, presumably on account of good rains during the last north-east monsoon. In the felled coupes, there was no germination due to growth of weeds and thorns. Reproduction by coppice shoots was satisfactory in three coupes and fair in two others. Natural regeneration is poor in the Udamalpet range due to low rainfall and rocky and steep nature of the soil. Natural regeneration of sandal in Thalinji, Yelumalayancoil and Karumalai forests was satisfactory.

Madura.—Sandal regeneration in Vellaparai, Coupes III and IV of Kombai series, was very fair and promising, and that in Sathiar Sirumalai East and North-east slopes of Sholavandan range very good. Adjoining the Ammayyanayakanur zamindari from a place called Vadagadu up to the point called Chakkaliam Kuttu the regeneration was excellent, and large patches of sandal growth have established themselves and the species is reported to be spreading fast. Sandal in Perumalmalai, Alagar Hills and Karandamalai reserves were enumerated. Natural regeneration of *Shorea Talura* in the Suruli plateau is reported to have been very good during the year and so is that of *Dalbergia latifolia*, *Tectona grandis*, and *Pterocarpus Marsupium* in the eastern and southern portion of the Surli plateau, in the timber areas in Vannathiparai and in the Amaravathi forests of Surunganur and Melagudalur reserves. The higher slopes of Sirumalai contain a fair percentage of timber species and among these there is a fair amount of natural regeneration of *Albizzia Odoratissima*, rosewood and

Pterocarpus Marsupium. In the Natham range, the natural regeneration of *Albizzia amara, chloroxylon* and *Albizzia Lebbek* is reported to be fair.

Tinnevelly.—There is a compact block of about 3,000 acres in the Alagarcoil valley more or less densly stocked with sandal and all age classes are represented up to a girth of over 35 inches. In the valley, there is another block of about 2,250 acres on the outer fringe but natural regeneration is generally poor everywhere. In the Kuttalam range, however, where an extent of about 220 acres is covered with sandal in the Kuttalam reserve, not only is the natural regeneration very good, but also the species is spreading fast into the adjoining area of the reserve.

(ii) *Establishment of reproduction under working plan or schemes.*

(*a*) Mainly natural.

32. Coppice growth in fuel coupes of *Kollegal* is very slow due to poverty of the soil and in *North Coimbatore*, and *South Coimbatore*, satisfactory in all the felled coupes except in some coupes of Mettupalaiyam range.

Tinnevelly.—Regeneration from coppice shoots has been generally satisfactory and that from seed poor. Teak, rosewood, *Pterocarpus Marsupium, Albizzia Lebbek* and *Albizzia amara* are found in fair abundance in the lower slopes of the reserves of Srivilliputtur range.

Madura.—Regeneration of rosewood is good and of *Adina cordifolia* under the Vannathiparai scheme and of *Albizzia amara* in the fuel coupes fair.

(*b*) Mainly artificial.

33. *Kollegal*.—The dibbling of sandal on stream banks and other favourable localities in small beds of 10 feet by 10 feet was, as usual, carried out with the object of establishing small groups of propagation centres. But the volume of work done has not been adequate nor the results satisfactory except in parts in the neighbourhood of Bylore.

South Coimbatore.—An area of 103 acres was selected in accordance with the prescriptions of the revised working plan awaiting sanction, clear-felled, burnt and re-burnt. Of this, six acres were handed over to the Forest Research Officer for his experiments and the balance formed the 1931 regeneration area. This

area was dibbled with teak at the end of March and completed in April 1931. The reburning was done under the personal supervision of the District Forest Officer.

Regeneration area, 1930 (224 *acres*).—The plantation was largely a failure for want of timely rains during the south-west monsoon. It was re-formed and all failures replaced by seed and generally weeded. The Taungya cultivation in the 15-acre plot was a failure.

Regeneration area, 1929 (151 *acres*).—This plantation has generally done very well. The whole area was tended (climbers cut and soil worked where needed). About 60 acres were accidentally burnt in March 1931. The damaged plants were at once cut back, and the resulting coppice shoots are coming up well.

Regeneration area, 1928 (144 *acres*).—A part of this was burnt in March 1930. Damaged plants were cut back and the resulting coppice shoots are reported to have come up very well. The area was weeded and pruned. Teak in the paddy area of 35 acres is not as successful as elsewhere.

Regeneration area, 1926 (251 *acres*).—This plantation is very much subject to damage by wild elephants.

Regeneration area, 1924 (226 *acres*).—A good plantation.

Regeneration area, 1920 (8 *acres*).—This plantation was a failure and written off.

Gap regeneration.—A beginning was made with artificial regeneration with valuable species in gaps caused by the removal of mature trees in selection fellings. Natural regeneration is usually not sufficient to restock gaps. Fifty-six gaps were selected, cleared, burnt and re-burnt in the 100 acres of selection-felled area of 1930. The gaps were prepared in time to allow of the dibbling of seed to be done early in April. The cost was Rs. 362. This is in accordance with the prescriptions of the revised working plan.

Formation of nursery.—One hundred and seventy-eight beds each 48 feet by 4 feet were formed during the year at a cost of Rs. 128 for supplying teak stumps for planting in 1932.

Punachi range—Regeneration area, 1931 (25 *acres*).—An extent of 25 acres was cleared and burnt in Periodic Block I for the formation of Regeneration area, 1931 at a cost of Rs. 169. The area was dibbled in April 1931.

Regeneration area, 1930 (25 *acres*).—This area was dibbled in May 1930. The total cost was Rs. 200. The germination was not appreciable as regards teak. The area was weeded and failures replaced in August 1930 and the result is reported to be promising. Regeneration of rosewood was good.

Regeneration area, 1929 (25 *acres*).—Weeding and replacing of failures were carried out in August 1930.

Regeneration area, 1926–28 (50 *acres*).—Weeding and tending was done in August and November 1930.

Regeneration area in Compartment 14-a.—Teak seeds were dibbled and the area weeded in July and November 1930 at a cost of Rs. 21, and casualties replaced. The results are not satisfactory, as there are very few seedlings on the ground.

Compartment 14 (2).—Rosewood and vengai are said to be coming up very well.

Pollachi range.—All debris and brushwood accumulated during felling of fuel coupes were heaped up and burnt and the space dibbled with teak seeds. A good number of teak seedlings died for want of rain. The area was kept clear of weeds. The total cost of the operation was Rs. 670. The operation was discontinued as the result was not encouraging.

Udamalpet range.—Seeds of important fuel species have been collected for dibbling in degraded portions of fuel coupes. Arrangements are said to have been made for restocking the blanks in Amaravathi Coupe XI during 1931–32.

Tinnevelly.—Twenty-five measures of rosewood seeds and an equal quantity of teak were sown in six felled coupes of Nanguneri range in September and October 1930. There was no germination of rosewood. Teak germinated but the seedlings after attaining a height of about six inches died due to insect attack and drought.

(*c*) Afforestation.

34. *South Coimbatore*.—During the year 58 rosewood trees were root-wounded in Regeneration area, 1930, 65 in Regeneration area, 1931, 60 in Compartment 7, 35 in Compartment 8, and 38 in Compartment 9 of the Punachi Timber Working Circle. Of the above, 46 in Regeneration area, 1930 and 50 in Compartment 7 have sent forth root-suckers. The root-wounding in other areas was done in March 1931 and the results are watched.

Tinnevelly.—Sowings of the following species were undertaken in the Kudiraimoliteri reserve. Palmyra nuts were dibbled, 12 feet by 12 feet in Teri Series V, over an area of 1,100 acres, in six compartments at a cost of Rs. 2,571–4–0. Similarly palmyra nuts were dibbled by seven palmyra lessees over an area of 120 acres in accordance with the terms of the lease. The results have so far been satisfactory. Germination is still in progress but the

year was abnormally bad as regards rain, the Teri forest receiving only 21 inches of rainfall during the north-east monsoon against 58 inches recorded in the previous year for the same period.

Madura.—All heaped up refuse in some of the worked fuel coupes of all the ranges except Palni was burnt, the resulting ash was raked up with the soil and seeds of *Albizzia amara, Acacia planifrons, Cassia auriculata, Chloroxylon Swietenia, Wrightia tinctoria* and *Albizzia Lebbek* were sown in the south-west and north-east monsoons. The germination in the former monsoon was poor but in the latter was good. Seedlings looked healthy till the middle of January, but, later for want of rain several withered away and died. *Acacia planifrons* and *Wrightia tinctoria* seemed to thrive better than the other species. It remains to be seen how many would survive the hot weather and how many that died back will re-establish themselves at the break of the monsoon.

(iii) *Plantations and other forms of regeneration not under working plans or schemes.*

35. *South Coimbatore.*—A 5-acre plot was selected in Compartment 2, Punachi Working Circle, and dibbled with sandal seeds. There are very few seedlings now and the operation is reported to be unsuccessful. Another 5-acre plot was selected in Compartment 5, and dibbled with sandal seeds in May 1931. The result is being watched.

North Coimbatore.—Sandal seeds were, as usual, dibbled in small plots, 10 feet by 10 feet to serve as propagation centres. Seventy seedlings were found surviving in Satyamangalam range. In Talamalai range, plots of one square chain were selected in each of the ten beats and the area cleared. Mounds 6 feet by 3 feet were raised and sandal seeds sown. Four thousand eight hundred and thirty-nine seedlings were found surviving. Brushwood in two worked fuel coupes of Bhavani range were collected and heaped 5 feet by 5 feet by 1½ feet. Two hundred heaps were so made and burnt. Seeds of *Albizzia Lebbek, Albizzia amara* and *Acacia* were sown. Seeds germinated fairly well and there were many seedlings in most patches. But at the end of the hot weather, only 25 seedlings of *Acacia* survived.

Sandal seeds were dibbled in all the beats of Mettupalaiyam range. Germination was good but the patches were washed away by the heavy rains.

Madura.—Attempts were made to introduce sandal, where it could be propagated with advantage, in small areas of one acre. Enumeration in January showed fair results, but several died

during the hot months. An enumeration of the previous years' sowings since 1921–22 showed that 166 seedlings are surviving with heights varying from 1½ to 30 feet, some of the 1921–22 plants being 20 feet to 30 feet high.

Tinnevelly.—Sandal seeds were dibbled in Valliyur reserve forest in places where dead casuarina stood. *Erythrina* cuttings were planted free of cost by subordinates to serve as hosts to the sandal seedlings. At the close of the year 147 seedlings of 1929–30 sowings, and 35 of 1930–31 were found to survive. The results of the sowing are reported to have been satisfactory.

(iv) *Tending.*

36. *Kollegal.*—Tending of sandal consisting of creeper cutting was done over 22,030 acres at a cost of Rs. 329.

North Coimbatore.—Creeper-cutting on sandal was done over 1,813 acres at a cost of Rs. 635. The results are reported to be satisfactory.

South Coimbatore.—The prescribed weedings in Regeneration areas, 1919, 1921–28 of Tunacadavu range and tendings in Regeneration area, 1926–30 and in Compartments 14-*a*, *b*, *c*, *d*, and Compartment 2 of Punachi Timber Working Circle were carried out as usual. Weedings round coppice shoots in the felled fuel coupes of Pollachi and Udamalpet ranges were also carried out.

Madura.—Tending of sandal trees in all ranges except Ayyalur was done at a cost of Rs. 171. Rupees 17 was spent towards tending two and fifteen acres of *Albizzia Lebbek* plots in Vannathiparai.

Tinnevelly.—Weeding was done in Mundanthorai teak plantation of 1928 and in Padarmalai Coupe XXVIII free of cost by subordinates. Replacing of casualties was done in the Padarmalai teak plantation, 1928 at a cost of Rs. 10. Rupees 30 was spent in tending the sandalwood area in Kuttalam.

(v) *General.*

37. *Kollegal.*—To improve the stocking of degraded fuel coupes, *Acacia cyanophylla*, *Prosopis juliflora* and *Cassia siamea* seeds were sown as an experiment. The results proved most disappointing.

Madura.—Creeper-cutting in regeneration areas is reported to have been done by subordinates free of cost.

Tinnevelly.—Climbers on important species are reported to have been cut by subordinates during their patrol duty free of cost. Creeper-cutting in three fuel coupes over an area of 229 acres was, however, carried out at a cost of Rs. 86.

CHAPTER IV.—EXPLOITATION.

(*a*) System of Management.

(i) *Major forest produce.*

38. The silvicultural systems in force were—

(i) Clear-felling with natural regeneration.

(ii) Simple coppice.

(iii) Coppice with standards.

(iv) Selection fellings.

(v) Unworked or other fellings.

(i) *Clear-felling with natural regeneration.*—This was confined to an area of 103 acres in *South Coimbatore*.

(ii) *Simple coppice.*—In fuel coupes, an area of 384 acres in *Kollegal*, 1,224 acres in *North Coimbatore*, 383 acres in *South Coimbatore*, 3,792 acres in *Madura*, and 485 acres in *Tinnevelly* were exploited during the year.

(iii) *Coppice with standards.*—The areas dealt with under this method were 142 acres in *Madura* and 1,193 acres in *Tinnevelly*.

(iv) *Selection fellings.*—In *Kollegal*, small timber for agricultural purposes was extracted over an area of 7,057 acres. In *South Coimbatore*, 290 acres were exploited for big timber for sale at Pollachi; and 155 acres for supply of sleepers to the railway. In *Tinnevelly*, an extent of 30 acres of the evergreen forests was gone over for the extraction of *Mesua* for supply of sleepers to the railway and other timber for local consumption. Besides the above, dead sandalwood trees were extracted over an extent of 48,200 acres in *Kollegal*, 2,400 acres in *Tinnevelly* and 38,518 acres in *North Coimbatore*. Green sandal trees in patta lands were extracted in about 100 acres in *Kollegal*. The aggregate yield from all these sources was 378 tons of sandalwood. The total output of timber was 332,000 cubic feet and of fuel 2,647,000 cubic feet from both the working plan and non-working plan areas of reserves in the Circle.

(ii) *Minor forest produce.*

39. Bamboo coupes were, as usual, worked on a 3-year rotation in all the ranges except in *Kollegal* where, on account of the gregarious flowering of *Bambusa arundinacea* and also of the sporadic flowering of *D. strictus* on more than usual scale, the entire felling series had to be leased. Bamboos required for departmental works were collected departmentally. In *Kollegal*, coupes which

could not be leased, were worked under the controlled permit system. Removal of dead bamboos was permitted in *Kollegal* and *North Coimbatore* to minimize the risk of fire.

40. *Grazing.*—This was, as usual, controlled by permits, a single permit being valid for a whole range.

As regards *minor forest produce*, the system of management was to lease the right of collection of the different items of produce annually in accordance with the provisions of the current working plans or schemes, over well-defined units of reserved forests, the range being the unit of sale. Where no contractor could be found the collection was to be departmental. The important items of minor forest produce were: ivory, gallnuts, cardamoms, sambhur and deer horns, tamarind, avaram bark, vembadam bark, konnai and somai bark and others. Ivory in *South Coimbatore*, gallnuts and sambhur and deer horns in *North Coimbatore* were collected departmentally. Konnai bark was, as usual, leased out on a 5-year rotation in *North Coimbatore and Madura.* It was not collected in *South Coimbatore* and *Tinnevelly* and the sale in *Kollegal* was postponed to 1931–32. In *South Coimbatore*, the right of collection of cardamoms on the Anamalais was leased out to the Planters' Association to prevent illicit removal of the planters' crop in the estates under cover of Government leases. Removal of stones, thorns and earth was permitted on permits to a limited extent in *Madura.*

Grass.—Free removal of fodder grass was not permitted. It was removed on permits in *Kollegal* and leased out in other divisions except *South Coimbatore* where there was no demand. Removal of manure leaf was permitted in two ranges of *Tinnevelly* on permits.

(*b*) Agency of Exploitation.

(*i*) *By departmental agency.*

41. *Major produce.*—Timber and sandalwood continued to be extracted departmentally. In *South Coimbatore* timber from the forests of Mount Stuart and Punachi Working Circles was extracted departmentally and carted to Pollachi depot for sale. Top ends of trees were converted into spokes and felloes and sold either at the forest depots or carted to Pollachi for sale. Logs that were not likely to pay after carting were sold at the forest depots. Brake poles were, as usual, cut and supplied to cartmen both on the Anamalai ghaut road and Satyamangalam-Chamrajnagar ghaut road. *Mesua* trees were extracted departmentally from the Kal-ar valley for sleepers and transported to Pollachi for supply to the railway.

Two thousand one hundred and eighty-four cubic feet of red cedar scantlings were converted and sold to Messrs. Spencer & Co., Dindigul.

In *Tinnevelly*, 29 trees of seven shola species felled from an experimental plot were converted into saleable units to meet the local demand. Total quantity so obtained including unsold stock in the depot during the year was 8,694 cubic feet of which 5,833 cubic feet were sold for Rs. 6,643. In addition three *Mesua* trees were felled and converted into 44 B.G. and 17 M.G. sleepers for supply to the railway.

42. *Minor produce.*—Gallnuts, sambhur and deer horns in *North Coimbatore*, and ivory in South Coimbatore were collected departmentally and sold in auction.

(ii) *By purchasers.*

43. Fifty-five cubic feet of Poon (*Calophyllum tomentosum*) timber were sold from shola forests at five annas per cubit foot. Fuel coupes were leased as usual to contractors except in *Kollegal* and *North Coimbatore* where coupes that could not be sold, were worked under the regulated permit system.

44. *Minor forest produce.*—Bamboos and minor produce were leased out to contractors. Two coupes in *Kollegal* that could not be sold and a small area in the Mettupalaiyam range in *North Coimbatore* were worked under the regulated permit system.

45. *By right and privilege holders.*—The quantity and estimated value of the different kinds of produce removed is shown in the following statement:—

—	Timber in thousands of cubic feet.	Value.	Fuel in thousands of cubic feet.	Value.	Bamboos in value.	Grazing value.	Other minor produce in value.	Total.
		Rs.			Rs.	Rs.	Rs.	Rs.
Right and privilege holders	..	..	..	..	..	1,416	611	2,027
Free grantees ..	24	5,041	..	..	376	15	22	413

Cattle up to 30 in number belonging to a temple in grazing block of Udamalpet range in *South Coimbatore* were allowed to graze free in the reserve. The Pulayars of Thalinji were allowed to cultivate 33 acres in accordance with the right admitted at settlement. The right to free grazing in the Ampthill down reserve in *Madura* was continued and the number of cattle admitted was 5,087 against 6,213 in the previous year.

46. *By free grantees.*—The free grants were chiefly for the rebuilding of houses destroyed by fire and heavy floods in *North Coimbatore*. Except timber, all the other grants were from reserves.

47. *Outturn and sources of forest produce.*—The attached statement shows the total outturn of major and minor produce from all classes of forests by all agencies during the year as compared with that of the previous year:—

Agency of exploitation.	Timber and sandalwood in thousands of cubic feet.		Fuel in thousands of cubic feet.		Bamboos in value.		Minor produce including grazing.	
	1930-31.	1929-30.	1930-31.	1929-30.	1930-31.	1929-30.	1930-31.	1929-30.
RESERVES.					RS.	RS.	RS.	RS.
By Government Agency.	230	207	96	97	5	9	4,442	1,272
By purchasers ..	102	99	2,551	2,992	38,158	36,215	1,80,545	1,96,222
By right and privilege holders.	..	..	..	..	.	..	2,027	2,301
By free grantees ..	..	..	..	..	376	..	37	..
Total ..	332	306	2,647	3,089	38,539	36,224	1,87,051	1,99,795
UNRESERVES.								
By Government agency.	..	..	..	..	..	..	..	..
By purchasers ..	210	226	314	326	3	2	36,183	46,095
By right and privilage holders.	..	..	..	..	..	..	..	..
By free grantees ..	24	28	..	..	..	14	..	97
Total ..	234	254	314	326	3	16	36,183	46,192
Grand total ..	566	560	2,961	3,415	38,542	36,240	2,23,234	2,45,987

48. *Reserves—By Government agency—Timber.*—The increase in 1930–31 was chiefly in *Kollegal* due to a larger quantity of sandalwood extracted and in *South Coimbatore* to increased outturn of timber from Punachi Timber Working Circle.

Fuel.—The increase in 1929–30 was due to sale of fuel from Valliyur reserve in *Tinnevelly*.

Minor produce.—The increase in 1930–31 was due to departmental collection of gallnuts, sambhur and deer horns in *North Coimbatore*.

49. *By purchasers—Timber.*—The increase was chiefly in *Tinnevelly* due to a larger quantity of small timber obtained from fuel coupes sold standing, than was the case in 1929–30.

Fuel.—The decrease was in *Kollegal* and *North Coimbatore* due to a smaller quantity of fuel removed from coupes on account of heavy floods and damage to tree growth. The fall in the selling rate of fuel has also contributed to the decrease.

Bamboos.—The increase was due to better prices realized in *South Coimbatore* and to sale of dead bamboos in *Tinnevelly*.

Grazing and minor produce.—The decrease was due to cattle mortality and poor prices realized for gallnuts and avaram bark in *Kollegal* and *Madura* and partly to the departmental collection of gallnuts, sambhur and deer horns in *North Coimbatore*.

50. *Free grants.*—The free grants were chiefly for re-building houses destroyed by fire and floods.

The following statement gives the total quantity of sandalwood sold from each division and the revenue realized in 1930–31.

Division.	Quantity.	Revenue realized.
	QRS.	RS.
Kollegal	14,820 (185·2 tons).	1,40,175
Coimbatore, North	9,549 (119 4 tons).	98,791
Tinnevelly	159 (2 tons).	1,763 .

CHAPTER V.—FINANCIAL RESULTS.

51. The statement below shows the financial position of the year under report compared with that of the previous year for the Circle as a whole :—

NON-COMMERCIAL.

Receipts.

Details.	1930-31. RS.	1929-30. RS.
Revenue including Valparai sleeper project	* 10,81,829	12,41,841
Deduct—Refunds	5,187	4,457
Net Total ...	10,76,642	12,37,384

* Excludes Rs. 2,504 relating to the Nilgiris and Madras Forest College and includes Rs. 1,763 realized in the IV Circle.

Expenditure.

Details.	1930-31.	1929-30.
	Rs.	Rs.
8.b. Conservancy, maintenance and regeneration	2,70,827	2,34,773
52-A. Capital Outlay	18,423	31,627
Total ...	2,89,250	2,66,400
Deduct—Receipts and recoveries on capital accounts on account of Mount Stuart Forests	17,580	24,661
	2,71,670	2,41,739
8.c.i. District Establishments ...	4,05,234	3,84,629
8.c.iii. Exploitation — Establishments	449	...
52-A. Forest—Establishments ...	6,362	...
Total expenditure ...	6,83,715	6,26,368
Surplus ... +	3,92,927 +	6,11,016

COMMERCIAL.

Revenue	* 1,60,482	† 2,02,936
Expenditure on works	1,15,601	1,18,384
Establishment	37,875	40,339
Interest and saw mill working expenses	22,778	49,993
	1,76,254	2,08,716

* Includes Rs. 11,263 being valuation of stock of timber.

† Rs. 4,313, being difference in the opening and closing stocks of timber, has been deducted.

During the year, under non-commercial areas, the gross revenue fell short by Rs. 1,60,012, while the total expenditure was increased by Rs. 57,347 when compared with the actuals of the previous year. The net surplus for the year under report is Rs. 3,92,927 against Rs. 6,11,016 for the previous year.

Under the commercial concern, the gross revenue and the total expenditure were reduced by Rs. 42,454 and Rs. 32,462 respectively.

52. The percentage of the several items of revenue and expenditure under non-commercial areas is noted below in a comparative form :—

Receipts.

Items.	1930-31.	1929-30.
	PER CENT.	PER CENT.
Major produce—Forest Department	60·3	62·6
Major produce—Revenue Department	4·8	4·5
Bamboos—Forest Department	3·4	2·8
Grass and grazing—Forest Department ...	11·2	10·0
Minor produce—Forest Department	6·0	6·1
Minor produce—Revenue Department	3·6	4·0
Other items—Forest Department	10·7	10·0

Expenditure.

8. b. Conservancy, Regeneration and Maintenance and 52-A Capital Outlay—		
Exploitation of forests	23	32
Upkeep and improvement of forests	27	16
Miscellaneous	50	52

The important variations under ' Receipts ' and ' Expenditure ' are explained below :—

Major produce—Forest Department.—The decrease was chiefly under sandalwood by Government agency and timber and fuel by purchasers :—

		RS.	
Sandalwood ...	—	1,41,868	Due to sale of a smaller quantity for a lower rate than in the previous year.
Timber ...	—	3,948	Due to there being no demand for timber felled from the Experimental plot at Kannikatty.
Fuel ...	—	21,352	Due chiefly in *Madura* to poor prices obtained for fuel coupes on account of trade depression.

Major produce—Revenue Department.—The decrease of Rs. 4,448 was chiefly under fuel in *Madura* and *Tinnevelly*.

Bamboos—Forest Department—Increase (+*Rs.* 1,742).—Although there was a decrease in *Kollegal* and *North Coimbatore* due to non-sale of two coupes in the former district and to the flowering of bamboos and non-sale of coupes in the Palamalais of Bhavani range in the latter district, it was compensated by an increase in *South Coimbatore, Madura and Tinnevelly* under ' purchasers ', due to better prices obtained during the year and to collection in *South Coimbatore* in 1930–31 of one-fourth of the revenue relating to 1931–32.

Grass and grazing—Forest Department—Decrease (—*Rupees* 3,638).—The decrease was in Kollegal and Madura due to cattle mortality.

Minor produce—Forest Department.—The increase was only Rs. 354 which calls for no remarks.

Minor produce—Revenue Department (—*Rs.* 9,900).—The decrease was chiefly in *Madura* and *Tinnevelly* due to fall in prices on account of general trade depression.

Other items (—*Rs.* 7,976).—The fall is chiefly in *Kollegal, Madura* and *South Coimbatore,* due partly in *Kollegal* to the contribution due from the District Board, on account of the maintenance of roads, not being realized in 1930–31; in *Madura,* to a smaller amount of compounding fees realized and in *South Coimbatore,* to rents on buildings in charge of the regeneration-unit of the Mount Stuart commercial concern not being adjusted.

Expenditure—8. b. Conservancy, maintenance and regeneration.—The increase was chiefly in *Kollegal, South Coimbatore* and *Tinnevelly.*

Kollegal—Sandalwood.—Due to a greater quantity of sandalwood extracted than was anticipated, and to extensive repairs to the ghaut roads to make them fit for heavy traffic.

South Coimbatore.—Due chiefly to adjustments of expenditure incurred in 1929–30, in 1930–31 accounts and partly to increase in expenditure under roads, buildings and sowing and planting.

Tinnevelly.—Due to a larger quantity of timber extracted during the year than anticipated.

52-A. *Capital outlay on forests.*—There had been an increase under buildings in *Kollegal,* due to construction of four subordinates' quarters and a godown for storing sandalwood; in *North Coimbatore,* to construction of a sandalwood godown; and in *Tinnevelly,* to purchase of two boats. The excess has been counterbalanced by a decrease in expenditure in *South Coimbatore* due to the withdrawal of Rs. 46,034 being the capital invested.

8. c.i. *District Establishments.*—The increase has been under 'Direction' and also in the two Coimbatores. Under 'Direction' it was due to the posting of an Extra Assistant Conservator on lac work and to the grant of passage money to one Conservator. In *North Coimbatore,* it was due to the posting of an Extra Assistant Conservator as Double Lock Officer, while in *South Coimbatore* it was due partly to the posting of a Provincial Officer for stock-taking of timber; and partly to the grant of increments to clerical staff and leave salary and promotion to foresters.

52-A. *Capital Establishment.*—A sum of Rs. 6,362 relating to establishment charges of the Mount Stuart commercial concern incurred in 1929–30 was adjusted in the accounts of 1930–31.

53. The revenue outstanding at the end of the year was Rs. 2,23,876–6–0 of which Rs. 16,943–8–8 fell due within the year. Of this, Rs. 5,511–11–9 have been realized since and only a sum of Rs. 11,431–12–11 remains to be collected. This includes the sum of Rs. 10,044–10–9, due from contractor A. Subba Pillai and its collection is pending disposal of the Letter Patent Appeal pending in the High Court.

The estimated value of timber and other produce at sale depots at the end of the year was Rs. 1,23,855 against Rs. 98,814 at its commencement.

54. *Financial results.*—The financial results of each district are dealt with below, after apportioning the 'Direction' charges to the divisions:—

KOLLEGAL.

	1930–31.	1929–30.
	RS.	RS.
Receipts	2,14,544	2,38,653
Charges	1,18,313	1,08,223
Surplus	96,231	1,30,430

Receipts.—The decrease was mainly under sandalwood due to a smaller quantity of, and lower rates obtained for, sandalwood sold and to non-realization of the amount of contribution due from the District Board for the maintenance of roads. The fall was also noticeable under bamboos, grazing and minor produce. Due to lack of demand, bamboo coupes could not be sold and mortality among cattle accounted for the fall under grazing.

Charges.—The increase was due to: (i) a larger quantity of sandalwood extracted than anticipated; (ii) extensive repairs to the forest ghaut roads to make them fit for heavy traffic, and (iii) construction of a bridge, four subordinates' lines and a sandalwood godown. Under Establishment there was an appreciable fall due to

the holding of a Vernacular Training School in the previous year and transfer of two special duty rangers and a fifth-grade ranger from the district.

NORTH COIMBATORE.

	1930–31.	1929–30.
	RS.	RS.
Receipts	2,10,869	3,37,889
Charges	1,31,934	1,18,399
Surplus	78,935	2,19,490

The decrease in receipts was mainly under sandalwood (Rs. 1,25,194) due to smaller quantity of sandalwood sold and low prices fetched at the auction. This was partly compensated by an increase under fuel due to better prices realized for it, and under 'Miscellaneous,' to an increase in the collection of compounding fees and contribution received from District Board. Under "Other minor produce by purchasers," there was a drop due to collection of gallnuts having been undertaken departmentally.

Charges.—There was an increase of Rs. 2,200 under minor produce by Government agency due to the departmental collection of gallnuts, and an increase under forest produce removed by private agency, due to (i) the entertainment of seven tannadars, (ii) the refund of grazing fees to panchayats, (iii) the construction of a clean-chipping shed, and (iv) the demarcation of the Barabetta reserve. This was partly counterbalanced by a fall of Rs. 4,954 under sandalwood due to extraction of a smaller quantity of sandalwood and payment of a less amount of compensation for sandalwood extracted from patta lands. Under Establishment and Travelling Allowance, there was an increase due to (i) the posting of an Extra Assistant Conservator as Double Lock Officer since August 1930, (ii) to an increase in the number of foresters and supernumerary rangers, and (iii) payment of an increased rent for the District Forest office and of arrear rent on residential buildings to the Public Works Department.

SOUTH COIMBATORE.

	1930–31.	1929–30.
	RS.	RS.
Non-commercial —		
Receipts	2,60,971	2,20,993
Charges	2,02,493	1,95,953
Surplus	58,478	25,040
Commercial —		
Receipts	1,60,482	2,02,936
Charges	1,76,254	2,08,716
Loss	15,772	5,780

Non-commercial—Receipts.—The increase was mainly due to the adjustment in 1930–31 of Rs. 38,464 being the profits from the Mount Stuart commercial concern for the year 1929–30.

Charges.—The increase was mainly due to (i) to felling a portion of Compartment 7 of Punachi Working Circle, in advance, (ii) to carting a larger quantity of timber to Pollachi for sale than originally anticipated; (iii) to the adjustment in the accounts of 1930–31 of the expenditure incurred in 1929–30; and (iv) to the increased number of gazetted assistants attached to the division during the year.

Commercial—Receipts.—The decrease of about Rs. 42,000 was chiefly due to want of demand for timber and consequent poor sales at low rates.

Charges.—The decrease of about Rs. 32,000 was due to less quantity of timber extracted during the year than in 1929–30, and to savings in the saw mill expenses, interest and overheads on account of the closure of the saw mill.

The loss during the year was Rs. 15,772 out of which a sum of Rs. 12,068 was adjusted being depreciation reserve on permanent roads transferred to profit and loss account. On account of this adjustment, the net loss was only Rs. 3,704.

A statement showing the production of cost of timber per cubic foot at Topslip and at Pollachi, the quantity extracted and transported and the quantity sold at Topslip and at Pollachi and other miscellaneous sales is appended :—

MOUNT STUART WORKING CIRCLE.

—	Quantity.	Rate.	Amount.
	C.FT.	RS. A. P.	RS. A. P.
Cost of production to Top Slip.—			
Felling charges	115,617	0 0 7·12	4,287 2 10
Dragging charges	114,763	0 1 2·15	8,459 15 8
Share of district overheads	115,617	0 7 11·42	57,536 12 3
		0 9 8·69	70,283 14 9
Cost of production at Pollachi.—			
Felling	115,617	0 0 7·12	4,287 2 10
Dragging	114,763	0 1 2·15	8,459 15 8
Sawing and squaring	101,444	0 0 1·78	938 4 0
Share of upkeep charges for elephants for loading work in the forests	101,444	0 0 9·40	4 971 11 5
Carting to Pollachi	101,444	0 6 8·00	42,267 14 0
Share of district overheads	115,617	0 7 11·42	57,536 12 3
		1 1 3·87	1,18,451 12 2
Cost of production of Scantlings.—			
No scantlings were converted since the mill was closed.			

Cost of Production of Spokes and Felloes at Pollachi—

	No. of sets.	Rate. RS. A. P.	Amount. RS. A. P.
Conversion charges ...	317½	6 0 0	1,905 0 0
Carting charges to Pollachi.	312½	4 0 0	1,250 0 0
District overheads ...	317½	5 7 6	1,735 9 0
		15 7 6	4,890 9 0

Sales at Pollachi.—91,034 cubic feet were sold for Rs. 1,33, 925–5–0 and the average rate works out to Rs. 1–7–6 per cubic foot.

Sales at Topslip.—10,860 cubic feet were sold for Rs. 3,845–1–6 and the average rate works out to Re. 0–5–8 per cubic foot.

Sale of sawn timber.—5,707 cubic feet was sold for Rs. 11,009–6–0½. The average rate works out to Rs. 1–14–10.

Sales at Madura.—1,865 cubic feet were sold for Rs. 3,883–12–3 and an average rate of Rs. 2–1–4 per cubic foot was obtained.

Sale of spokes and felloes (old stock).—562 sets were sold for Rs. 6,371–10–0. Average rate works out to Rs. 11–5–5 per set.

Overseas sales.—Messrs. Pierce, Leslie & Co., sold 115 cubic feet of Haldu logs for Rs. 182–10–1 at an average rate of Rs. 1–9–5 per cubic foot.

MADURA.

	1930–31. RS.	1929–30. RS.
Receipts	2,08,891	2,50,815
Charges	1,34,844	1,35,615
Surplus	74,047	1,15,200

The decrease in receipts was mainly under firewood and charcoal by purchasers (—Rs. 22,528), due to poor prices realized for fuel coupes sold; under grazing (2,486), to cattle mortality; and under minor produce both in reserves and unreserves, on account of general trade depression.

TINNEVELLY.

	1930–31. RS.	1929–30. RS.
Receipts	1,64,278	1,72,194
Charges	94,029	92,368
Surplus	70,249	79,829

The fall under revenue was due to low rates obtained for sandalwood from reserves, and minor produce from unreserves.

Charges.—The increase was partly due to the extraction of greater quantity of timber from the experimental coupe at Kannikatti and partly to the metalling of roads and to the purchase of two boats.

TANJORE.

	1930–31. RS.	1929–30. RS.
Receipts	17,089	19,967
Charges	2,102	2,917
Surplus	14,987	17,050

Receipts.—The decrease is partly under ' firewood and charcoal ' due to the poor prices realized for fuel coupes sold and partly under ' Miscellaneous—Other sources ' which fluctuate.

Charges.—The increase in 1929–30 is due to an erroneous debit of Rs. 1,200 under ' Pay of officers—Voted.'

CHAPTER VI.—RESEARCH AND EXPERIMENTS.

55. Experimental plots, opened in *Kollegal* and *North Coimbatore* last year to observe the incidence of ' spike ', etc., were continued to be maintained. Observations made from time to time show that the highest incidence of ' spike ' occurred in July and that ' spike ' had not yet spread to the reserves in Mettupalaiyam range from the primary source of attacks in the patta land adjoining the Kallar reserve. Another area was opened in the Talamalai range (*North Coimbatore*) to observe the conditions under which the spread of ' spike ' could be arrested, but the result so far has been inconclusive, but the experiment will be continued. Experiments to introduce lac in *North Coimbatore* showed that it could perhaps be successfully grown on *Shorea talura* and *Zizzyphus jujuba* in the hill forests of Satyamangalam and Talamalai, but it is too early to say whether the work could be taken up on a large scale. In Kollegal, the establishment, as an experimental measure, of *Acacia dealbata* and *decurrens*, as an evergreen belt for the protection of the sholas against forest fire at Bellaji has proved successful and the plants referred to in the last annual report are doing well. In consultation with the Forest Research Officer, an experiment to improve the stock in degraded fuel forests was made and seeds of *Acacia cyanophylla*, *Cassia siamea*, and *Prosopis juliflora* were sown in mounds and pits in a plot of one acre near

Lingamankerai on 16th August 1930. *Acacia cyanophylla* did not come up well, but the others had a very good start both in mounds and patches. Enumeration in February 1931, however, showed that *Prosopis juliflora* seedlings had begun to die and *Cassia siamea* continued to do well. But during April 1931 *Cassia siamea* also began to die. Only eight seedlings of *Cassia siamea* and two of *Prosopis juliflora* were found surviving in May 1931.

An experiment to introduce sandal in conjunction with cereal crops and *Acacia cyanophylla*, *Cassia siamea* and *Acacia farneseana* (the latter three species to serve as hosts for sandal) was started in a 4-acre plot. The plot was subdivided into four plots of an acre each, where sandal and dhal were sown along with the three species named above on worked up soil. Enumeration made in May 1931 gave the following result:—

		Seedlings.
Plot I	Sandal	533
	Erythrina	...
Plot II	Sandal	256
	Cassia Siamea	81
Plot III	Sandal	221
	Acacia farneseana	56
Plot IV	Sandal	72
	Acacia Cyanophylla	0

In another plot sandal was raised with cereal crop but the result proved ultimately disappointing. The total cost of experiments amounted to Rs. 232.

North Coimbatore.—Experiments were conducted to introduce sandal in pits and also in conjunction with dhal, under forest conditions. The experiment so far as it related to the raising of the species in pits in the forest proved naturally a failure, but that of growing it in conjunction with dhal has given encouraging results. The cost of the operation amounted to Rs. 150.

South Coimbatore—Panachi range—Vengai sample plot—1 acre.—This plot was accidentally burnt in April 1930. The measurements recorded in August 1930 showed that they were appreciably below those recorded in previous years, presumably due to fire. The eight sholas on the grass hills continued to be fire-protected to ascertain its effect on the extension of the shola forests. The experimental burning of lantana in Periodic Block I was carried out, but, as the results obtained so far were not satisfactory, the operation was discontinued. The experimental sandal plot of five acres was a failure. Another plot of five acres has been selected and the result remains to be seen.

Madura.—The result so far achieved in the regeneration operations prescribed in the Vannathiparai scheme is detailed below :—

Plot I (1·90 acres), was a good mixture of valuable species. It contains 1,770 established seedlings over two feet in height and 827 under two feet. Further stocking is not necessary.

Plot II (0·73 acres).—Same as Plot I. It contains 543 seedlings over two feet and 344 below two feet.

Plot III (1·05 acres).—The stocking of natural seedlings is quite satisfactory, but teak is absent. It contains 718 seedlings over two feet and 405 below two feet. Rosewood is predominating.

Plot IV (0·20 acre).—It contains 319 seedlings of valuable species over two feet and 84 below two feet. Teak is absent and rosewood is predominating.

Plot V (1·50 acres).—This plot is noted for its *Stephegyne parviflora* and *Stereospermum* which form about 45 per cent of the total stock. It contains 1,431 seedlings of valuable species over two feet and 46 below two feet.

Plot VI (2·52 acres).—The stock in the plot except for the 374 *Stereospermum* seedlings is very poor. Though there are good *Adina* seed-bearing trees in the plot, there are only 23 *Adina* seedlings in it, a circumstance due largely perhaps to the absence of weed-free fresh soil to serve as a good germinating bed for the tiny seeds.

Coupe I (5 acres).—Owing to the heavy damage frequently caused by wild elephants from July 1930 to February 1931, the enumeration taken in February 1931 showed nearly 50 per cent casualties on the whole. But it is interesting to note that in addition to the artificially grown 3,181 seedlings, there were counted 1,765 naturally grown seedlings of valuable indigenous species.

Coupe II (5 acres).—Same as coupe I, but this has a good stock of teak, but there will probably never be more than a year old shoots, as this is subject to damage by wild elephants which visit the locality every year.

Coupe III (5 acres).—Owing to the utter failure of the south-west monsoon in 1930, and due to wild elephants which frequented the coupe, the percentage of casualties was as heavy as 59 per cent. But in spite of this there is a good stock of natural regeneration of rosewood and vagai (*Acacia lebbek*), both by seed and root suckers.

In this valley the soil is very rich and favourable to the growth of rosewood and ' vagai ', which regenerate very freely both by seed and root suckers wherever and whenever a gap is found.

Kusum (Pulichi) *Schleichera trijuga* is another species that competes with rosewood and ' vagai '. Among soft wood species

Melia dubia is one which draws one's attention. This being a fast growing species, and one which has a tendency to grow gregariously, will eventually outbeat all other valuable slow growing species, and already in all clear-felled area this species is becoming very conspicuous and predominating.

Satinwood plot.—There are 99 seedlings with an average height of 9 inches. All these seedlings look healthy and well established, but the height growth for their age is rather poor.

' Vagai ' plot (2 acres).—There are 742 seedlings including the 1,930 seedlings. As the overhead canopy is high these seedlings are subject to heavy shade and drip.

Though the operation was started in June 1927, there are only 41 seedlings which are over two feet in height, casualties being more in the unweeded area than in the weeded.

' Vagai ' plot (15 acres).—There are 2,082 seedlings in the plot out of which there are 841 in the weeded area and 1,241 in the unweeded. These seedlings, though they keep on the struggle, do not easily die out under shade. But they show a great tendency to shoot up and put on height growth wherever overhead light is obtained.

Cumbumettu ' vagai ' plot.—The number of seedlings year by year is decreasing as the overhead canopy grows.

Aini plot—Kumili.—The seedlings appear as if they have no future. There is hardly any improvement in height growth.

A sandalwood plot of five acres was opened in Karandamalai and sandal was sown with dhal and ragi. But owing to failure of the south-west monsoon the germination was poor. Seeds were re-sown at the break of the north-east monsoon and the germination was fair. On harvesting ragi an enumeration made in February 1931 showed that 396 seedlings were surviving. The percentage of success was 22.

Tinnevelly.—The following seeds were sown in Kudiraimoliteri reserve :—

Species.	Area in acres.	Cost.	Result.
Dodonea viscosa	Fifty acres ..	RS. A. 68 5	Most of the seedlings died unable to survive the hot weather.
Acacia planifrons	Ten acres ..	..	Germination was noticed but the seedlings did not survive the abnormally severe hot weather.
Cashew nut	Five acres ..	..	Practically a complete failure.

Experimental sowings of the following species were tried on mounds and furrows in the fuel coupes of three ranges :—

Cassia Siamea 6½ lb.
Prosopis Juliflora 8 lb.
Acacia Cyanophylla 6 oz.
Albizzia Lebbek, *Melia azadirachta* } 2 acres

A fair number of *Cassia siamea* and *Albizzia Lebbek* seedlings have survived, but *Prosopis juliflora* did not do well. Neem seeds were attacked by rodents and destroyed.

A copy of the report on the sylvicultural experimental work at Kannikatti by the Assistant Working Plans Officer for regenerating the blanks caused by felling, selected evergreen trees in Kannikatti range was sent to the Conservator of Forests, Third Circle.

CHAPTER VII.—ADMINISTRATION.

56. Mr. T. A. Whitehead held charge of the Circle till 6th February 1931 afternoon, when he was relieved by M.R.Ry. Rao Sahib K. R. Venkataramana Ayyar Avargal.

Changes in the territorial jurisdiction.—The Anamalai sleeper project was transferred from the *Engineering Branch* to the *South Coimbatore Forest division* on 1st April 1930 and the Pollachi log depot from the Forest Utilization Officer on 1st December 1930 to the same division.

57. *Health of the establishment*—Continued to be generally good in *Tinnevelly*, except in one range, Kannikatti, fair in *Madura*, and not satisfactory in the other three divisions where several subordinates had to be granted leave on grounds of ill-health for varying periods.

Casualties.—In *Kollegal*, two forest guards died of malaria and one watcher was accidentally drowned in a well. One forest guard died of snake-bite in *North Coimbatore* and one forester committed suicide in *South Coimbatore*.

One forester and one range clerk retired from service in *North Coimbatore*.

58. *Sanitation—South Coimbatore.*—A sum of Rs. 642 was spent on clearing growth and on drainage round residential quarters at Topslip and Anaipadi and undertaking other sanitary measures. Rupees 25 was spent on cutting and burning lantana and excavating drains in the compound of the buildings at Waterfall. Sanitation in many places in *Kollegal* continued to be bad.

Beyond keeping the subordinates' quarters and rest-houses cleared of vegetation, no other measures were undertaken, in the division.

59. *Tours.*—The Mount Stuart forests were visited by the Chief Conservator of Forests, the Conservator of Forests, Third and Fifth Circles and the Forest Entomologist, Dehra Dun. The Timber Advisory Officer, Railway Board, Delhi, visited Pollachi and Valparai. The Chief Conservator toured in *Kollegal, Madura,* and *North Coimbatore* and the Conservator of Forests, in all the divisions of the Circle, spending more than six months in camp and wrote inspection notes on the forests of the *Madura* division.

All the District Forest Officers spent more than the prescribed minimum in camp, except the District Forest Officer, *North Coimbatore,* whose touring fell short by two days which is negligible.

60. *Inspection of District Forest and Range officers.*—The Conservator of Forests inspected all the District Forest offices in the Circle and the result was on the whole satisfactory, except in *South Coimbatore.*

The District Forest Officers inspected all the *Range offices* in their divisions and the result was generally satisfactory except in Kodaikanal, Kannikatti and Bargur ranges.

61. *The District Forest Officers' accounts.—Inspection.*—The audit staff of the Accountant-General's office inspected the accounts of *Kollegal, Madura* and *Tinnevelly* District Forest offices during the year and the result was generally satisfactory. Accounts of *North Coimbatore* and *South Coimbatore* were inspected after the close of the year and report of result is awaited. The accounts of the Mount Stuart commercial concern were audited by the staff of the Assistant Director of Commercial Audit, for the year ending 31st March 1930, and for the half-year ending 30th September 1930.

62. *Madras Forest College.*—No one was deputed to the College during the year for the 1930–32 course. One student who was deputed for the 1928–30 course returned with a higher standard certificate.

63. *Vernacular Training School.*—One forester and nine forest guards were deputed to the Vernacular Training School session held at Palghat from 1st May 1930 to 31st October 1930 and all came out successful.

CHAPTER VIII—GENERAL.

1. Formation and Management of Panchayats.

64. No forest areas were handed over to panchayats during the year.

2. MEASURES FOR IMPROVING LOCAL SUPPLIES AND FACILITIES.

65. Except in two ranges in *Tinnevelly*, no *leaf manure* was removed from the reserves. The revenue realized from this source in *Tinnevelly* was Rs. 2,445 against Rs. 3,132 in the previous year. The Agricultural Department is reported in *Tinnevelly* to be giving all facilities to the ryots for growing their requirements of green leaf manure in their patta lands. The demand from reserves appears therefore likely to show a welcome decline.

Supply of fuel and agricultural implements—Kollegal.—The fuel coupes were, as usual, worked on the controlled permit system as there was no demand for coupes put up for sale standing. Removal of dry fuel from old coupes of Araipalaiyam was allowed to meet the local demand. The demand for agricultural implements was, as usual, being met in *Kollegal* from annual coupes laid out for the purpose, the removal being effected on the so-called ' controlled permit system '. As it was feared that this system was open to grave abuse, steps have been taken after the close of the year to evolve a more satisfactory arrangement.

In the remaining divisions, the demand for agricultural implements and small timber is being, as usual, met from fuel coupes worked through the agency of contractors. Bamboos were similarly made available from coupes of the year worked through the agency of contractors. In addition to the above, axe-cut spokes and felloes, prepared out of the top-ends of timber trees felled departmentally, were sold to the public in *South Coimbatore*. Brake-poles were also supplied, on payment, to cartmen taking loaded carts down the Dhimbam (*North Coimbatore*) and the Anamalai (*South Coimbatore*) ghaut roads.

3. IMPROVEMENT OF WATER-SUPPLY IN GRAZING GROUND.

66. Two wells in *Kollegal* were deepened at a cost of Rs. 160. A sum of Rs. 116 was spent in *North Coimbatore* on clearing jungle infested with prickly-pear and on deepening a tank. In *Madura* a well was deepened at a cost of Rs. 54 of which Rs. 50 was contributed by the villagers of R. Kombai.

Timber Transit Rules.—The rules are reported to have worked satisfactorily. The revised rules referred to in the last report were brought into force in *North Coimbatore* during the year and seven tannadars were appointed to check timber in transit. The opening of tana stations at Hassanur and Kempanaickanpalaiyam is reported to have helped the protection of Gutialattur reserve, against the smuggling of timber from it.

Sandalwood Transit Rules.—The rules were revised so as to bring within their scope practically the whole of the civil district

of Coimbatore with consequent provision for additional checking stations. The revised rules received the assent of Government, during the year. Rules to regulate the transport of sandalwood in the *Tinnevelly* district, having for their object the prevention of smuggling of sandalwood by sea, are awaiting the sanction of Government.

67. *Jungle tribes.*—The jungle tribes were employed in the same way as in the previous years. In *Kollegal* attempts were made to bring in more sholagas to the abandoned podus particularly to those in the Doddasampagai reserve. In *North Coimbatore* six additional areas covering an aggregate extent of 100·15 acres, were leased to the sholagas during the year. Out of Rs. 500 sanctioned by Government, an amount of Rs. 493–4–0 was spent on hiring or purchasing plough-bulls for four settlements. In *Madura*, the hill tribe, known as the Puliyans, were utilized in connexion with the cultivation of lac. A proposal to settle them down in the Vannathiparai reserve is under consideration. In *Tinnevelly* arrangements have been completed to lease an extent of 40 acres to form a ' Kani ' settlement in the neighbourhood of Kannikatti.

68. *Mining and quarrying.*—There was no alteration in the rules.

69. *Cultivation in reserved forests.*—The disreservation of the Honnametti estate in *Kollegal* referred to in the last year's report is still pending and the estate continues to be held on lease. In *South Coimbatore* two new leases of an extent of 11·25 acres, were granted for supply of labour and for tending sandalwood trees. The areas sanctioned by Government for grant under ryotwari tenure for the cultivation of plantation products on the Anamalais have not yet been disreserved pending completion of survey. In *Madura* 362 acres were leased out for cultivation of cardamoms during the year, the total area under cultivation being 4,154 acres.

70. *Livestock*—(1) *Elephants—South Coimbatore.*—There were 26 elephants at the commencement of the year, 12 were captured and one born, making a total of 39. Of these, five died, thus leaving a balance of 34 at the close of the year of an estimated value of Rs. 76,850.

(2) *Other animals.*—Nil.

71. *Veterinary assistant.*—The elephants were in charge of the Assistant Veterinary Inspector and were inspected by the Inspector of Livestock at frequent intervals. The health of the elephants is reported to be not entirely satisfactory but said to be improving.

72. *Civil Suit—South Coimbatore.*—The suit filed in 1927 by the department regarding the return of a security deposit. was decreed in favour of the department.

Madura.—The appeal preferred to the Full Bench of the High Court and referred to last year is yet pending.

Tinnevelly.—The compensation suit appeal in respect of a portion of the disafforested portions of the Teri reserve forest pending for the last four years ended in favour of the department.

73. *Control of unreserved land by the Forest Department.*—The department has no control over the unreserved lands in the Circle, except in *Kollegal* and *North Coimbatore*, where the department exercises a certain amount of control over localities containing sandalwood trees for which they have been included in the Sandalwood Working Circle of the respective divisions. In addition, an area of 866·8 acres of bamboo-covered unreserved lands in *North Coimbatore* has been included in the Bargur Working Circle, for exploiting bamboos. The lease of fuel in Andi-Goundanur unreserve in *South Coimbatore*, granted in 1929–30 on a 3-year lease continues.

ENCLOSURE.

REPORT ON EACH FOREST DISTRICT, 1930–31.

KOLLEGAL.

Description.—Same as reported in 1929–30.

Area.—Nine hundred and forty-seven square miles, all under Class I.

How the forest district is split up into subordinate administrative charges.—The whole division is divided into three ranges consisting of 49 beats.

Names of ranges with headquarters—

Ranges.	Headquarters.
Kollegal	Kollegal.
Ramapuram	Kowdalli.
Bargur	Thattakarai.

Cost of administration—

	RS.
Pay of—	
Officers	10,400
Rangers	6,485
Subordinate staff	20,428
Clerical staff	6,254
Menials	752
Temporary staff	368
Allowances	11,090
Contingencies	3,742
Total	59,519

Cost under other important heads—

8-*b*. Forest Conservancy, maintenance and regeneration—

	Rs.
Sandalwood	14,731
Timber and other produce removed by consumers and purchasers	10,353
Renewals and replacement of stores	26
Roads and bridges	7,531
Buildings	2,286
Other works	44
Regeneration	232
Fire-protection	713
Other works	329
Miscellaneous	102
Total ...	36,347

52-*A*. *Capital outlay—*

Purchase of stores	291
Demarcation	318
Other works	160
Roads and bridges—New works	1,903
Buildings—New works	8,992
Other works—New works	15
Total ...	11,679

Income from main sources—

By Government agency—	
Sandalwood	1,40,175
Timber	51
By private agency—	
Timber	3,437
Firewood	3,917
Bamboos	6,146
Grazing	45,614
Minor produce	5,133
Miscellaneous (including driftwood)	6,432
Receipt from Revenue Department	3,657
Total ...	2,14,562
Deduct—	
Refunds	23
	2,14,539
Surplus ...	1,06,994

Chief works done.—Introduction of sandalwood in suitable places, extraction of sandalwood and supply of fuel, bamboos and small timber to Kollegal and neighbouring villages are the main operations in the district. In order to facilitate extraction of forest produce mainly sandalwood, and inspection of forests, the maintenance of the three ghaut roads in the district received special attention.

The three roads are—

(1) Ajjipuram-Girgaikandi-Tamarakarai road.

(2) Lokkanhalli-Bailur road.

(3) Kowdalli-Chengadi-Ponnachi road.

The following buildings were built for the housing of the subordinates:—

	Rs.
Subordinates's lines at Kothanur (incomplete)	4,638
Do. do. Bandalli	1,211
Do. do. Saggiam	1,242
Do. do. Chengadi	1,205
Sandalwood godown at Tamarakarai	695
Bridle-path from Uthapium to Madeswaranmalai	747

The boundary of Hoggiam enclosure was permanently demarcated.

Other works undertaken.—Early-burning of grass between the outer edges of sandal blocks and frontier boundary, deepening the wells, and creeper-cutting in sandalwood areas.

North Coimbatore.

Description.—Same as reported in 1928-29.

Area.—The division comprises of 872 square miles of reserves, of which 40 square miles are under the management of the panchayats. All the reserves under departmental control are in Class I.

How the district is split up into subordinate administrative charges.—The division consists of four ranges with 50 beats.

Ranges.	*Headquarters.*
Satyamangalam	Satyamangalam.
Talamalai	Do.
Bhavani	Andiyur.
Mettupalaiyam	Mettupalaiyam.

A sandalwood sale depot is located at Satyamangalam in the Satyamangalam range with a ranger in charge of it. The sandalwood extracted in *North Coimbatore* and *Kollegal* divisions, as also a part of the wood extracted in the *Nilgiris* district is disposed of in auction annually here.

Cost of administration—

	Rs.
Pay of—	
Officers	13,807
Rangers	9,689
Subordinate Staff	20,560
Clerical staff	8,235
Menials	1,058
Temporary establishment	731
Allowances	12,426
Contingencies	5,325
Total ...	71,831

Cost under other important heads—

By Government agency—	
Timber	146
Firewood	351
Sandalwood	16,994
Minor produce	2,285
Timber and other produce removed by consumers and purchasers	10,720
Renewal and replacement of stores	97
Roads and bridges	7,813
Buildings	2,381
Regeneration	150
Fire-protection	1,878
Other works	1,118
Miscellaneous	1,145
Total ...	45,078

52-A. Capital—	
Purchase of stores	306
Demarcation	562
Buildings—New works	1,785
Other works—New works	437
Total ...	3,090
Grand Total ...	48,168

Income from main sources—

	Rs.
By Government agency—	
Sandalwood	98,791
Timber	634
Firewood	...
Other minor produce	268
By private agency—	
Timber	1,049
Firewood	24,588
Bamboos	17,435
Grazing	37,483
Other minor produce	7,938
Revenue from unreserved lands	10,200
Miscellaneous (including driftwood)	14,951
Total ...	2,13,337
Deduct—	
Refunds	2,118
	2,11,219
Surplus ...	91,220

Chief works done.—Extraction and marketing of sandalwood, supply of firewood, bamboos and agricultural implements to neighbouring towns and villages, and introduction of sandal in suitable localities are the important operations in the division. Gallnuts, sambhur and deer horns were collected departmentally during the year, as an experimental measure.

The following ghaut and hill roads were maintained by the department:—

Bargur ghaut road (11 miles, 6 furlongs).

Dhimbam Talamalai road (15 miles, 6 furlongs).

Kempanaickanpalaiyam-Gairmalam road (31 miles) .

Hassanur-Bailur road (18 miles).

Kadambur-Uginium road (11 miles, 4 furlongs).

Dimbam-Hosatti road (72 miles, 6 furlongs).

Kil-Kotagiri road (5 miles, 6 furlongs).

Fire-protection of the reserves, enumeration of sandal in the Palamalai reserve, tending, demarcation of Barabetta reserve, construction of a clean-chipping shed at Satyamangalam and construction of an open channel for supply of water to the rest-house at Geddasal are other important works undertaken during the year besides improving and repairing minor roads and buildings.

SOUTH COIMBATORE.

Description.—Same as reported in 1928-29.

Area.—Three hundred and ninety-one square miles of which five are ryots' forests.

How the district is split up into subordinate administrative charges.—The division is divided into four ranges. Of these Tunacadavu and Punachi ranges have no beats and the other two ranges are split into seventeen beats.

Ranges.	Headquarters.
Tunacadavu	Topslip.
Punachi	Waterfall.
Pollachi	Anamalai.
Udamalpet	Udamalpet.

Cost of administration—

Non-commercial unit including Valparai project—

	RS.
Pay of officers	25,866
Pay of establishment—	
Rangers	13,490
Subordinate staff	13,416
Clerical staff	7,680
Menials	785
Temporary	2,578
Allowances	14,766
Contingencies	5,500
	84,081
Add—	
Cost of permanent establishment adjusted in March finals	2,772
	86,853

Cost under other heads—Non-commercial unit—

8 (*b*) Forest Conservancy, Maintenance and Regeneration—

	Rs.
Timber by Government agency	85,675
Firewood by Government agency	164
Minor produce	64
Timber and other produce removed from forests by consumers and purchasers	2,929
Renewals and replacement of stores	317
Feed and upkeep of cattle	13,834
Roads and bridges	4,670
Buildings	3,166
Other works	1,453
Rates and taxes	50
Maintenance and boundaries	219
Regeneration	13,049
Fire-protection	1,549
Other works	1,782
Rent of Tekkadi leased forests	2,500
Miscellaneous	— 25
Total ...	1,31,396
Cost of sleeper operations in Pollachi depot including Forest Utilization Officer's overheads	5,921
Total ...	1,37,317
52-*A*. *Capital*—	
Roads and bridges	9,511
Buildings	2,864
Other works	— 60
Purchase of cattle	17,452
Purchase of stores, tools and plant	82
Organization, etc.—	
Sowing and planting	6,221
Protection from fire	1,609
Other works	336
Total ...	38,015
Investments in Government commercial undertakings—Mount Stuart forests	— 46,449
Grand Total ...	— 8,434
Deduct—	
Receipts and recoveries on capital account ...	17,580
Net Total ...	— 26,014

Income from main sources—

	Rs.
By Government Agency—	
Timber	1,67,721
Firewood	120
Minor produce	585
By private agency—	
Timber	724
Firewood	15,716
Bamboos	7,995
Grazing	4,634
Minor produce	6,704
Miscellaneous	6,616
Revenue from unreserved lands	7,436
Profits for 1929–30 from Government Commercial undertakings adjusted during the year.	38,464
Recoveries of investments from Government Commercial undertakings	68
Recoveries of indirect charges	6,544
	2,63,327
Deduct—Refunds	2,359
Total ...	2,60,968
Surplus from non-commercial unit	62,812
Mount Stuart Working Circle—	
Receipts for 1930–31—	
Timber	1,57,601
Bamboos	2,400
Miscellaneous	481
	1,60,482
Add—Depreciation reserve on permanent roads adjusted	12,068
Total ...	1,72,550
Expenditure—	
Timber	73,734
Feed and keep of cattle	13,432
Renewals and replacement of stores	205
Roads and bridges	16,516
Buildings including temporary sheds	683
Other works	1,264
Working plans	600
Other works	389
Rent of Tekkadi leased forests	2,500
Supplies and services	6,278
Total ...	1,15,601

Establishment—

		Rs.
Pay of establishment—		
Permanent		10,374
Temporary		1,303
Travelling allowance		1,993
Fixed travelling allowance		812
Other compensatory allowances		144
Rent of buildings		1,936
Miscellaneous		955
Overheads		20,358
Total ...		37,875
	Rs.	
Interest on capital	23,660	
Less interest on depreciation reserve deposit	— 822	22,778
		1,76,254
Net loss		3,704
Surplus for the whole division		59,108

Chief works done.—Extraction of timber from Mount Stuart and Punachi Working Circles, elephant-capturing in Tunacadavu range and regeneration of the areas exploited. Extraction of sleepers from Valparai. Formation of teak plantations.

The following are the other works undertaken:—

Carting timber for sale to Pollachi, cutting and conversion of spokes and felloes, repairs to roads, buildings and telephone line. Fire-protection of plantations, depots and buildings. Anti-malarial measures to keep forest stations free from malaria. Demarcation of a portion of the outer boundary of Punachi Working Circle and demarcation of fuel coupes and regeneration areas. Extraction of sleepers and transport to Pollachi for supply to railways. Construction of fair-weather road in Tunacadavu range for extraction of timber. Extension of telephone line from Anaipadi to Sungam. Construction of subordinates' lines at Manupatti and construction of latrines to the buildings at waterfall.

Madura.

Description.—Same as reported in 1928-29.

Area.—Six hundred and eighty-three square miles. Of this 37 square miles are ryots' forests.

How the district is split up into subordinate and administrative charges.—

Ranges.	Headquarters.
Cumbum	Cumbum.
Palni	Palni.
Kodaikanal	Kodaikanal.
Ayalur	Ayalur.
Natham	Natham.
Sholavandan	Andipatty.

Cost of administration—

	RS.
Pay of officers	18,403
Rangers	11,605
Subordinate staff	26,158
Clerical staff	8,365
Menials	1,403
Temporary staff	1,053
Allowances	13,881
Contingencies	3,464
Total	84,332

Cost under other important heads—

Timber	398
Firewood	1,017
Sandal wood	93
Forest produce removed by consumers and purchasers	13,524
Renewals and replacements of stores	78
Roads and bridges	11,216
Buildings	2,514
Other works	78
Regeneration	364
Fire protection	3,556
Other works	331
Miscellaneous	393
Total	33,562

52A. *Capital—*

Purchase of stores	432
Demarcation	1,670
Other works	868
Roads—New Works	493
Do. in progress	334
Buildings—New works	1,690
Other works—New works	489
Total	5,976
Total	39,538
Grand Total	1,23,870

Income from main sources—

	Rs.
By Government agency—	
Timber	839
Firewood	722
By private agency—	
Timber	1,214
Firewood	91,630
Bamboos	2,957
Grazing	24,478
Other minor produce	28,468
Miscellaneous	25,116
Receipts from unreserved lands	35,160
Total ...	2,10,584
Deduct—Refunds	1,697
Total ...	2,08,887
Surplus	85,017

Chief works done.—These are the supply of fuel, bamboos and timber, and the maintenance of long lines of communications belonging to district boards and the Forest Department. Sylvicultural experimental work is in progress at Vannathiparai. Experiments are being continued regarding introduction of lac in Vannathiparai reserved forests. The boundary lines of some of the enclosures and reserves and the areas granted for the cultivation of cardamoms are being demarcated. A Public Works Department building at Manapparai was purchased during the year to serve as a forester's quarters. The pine plantations and some sholas were fire-protected.

TINNEVELLY.

Description.—Same as reported in 1928–29.

Area.—Four hundred and seventeen square miles of which ten are ryots' forests.

How the district is split up into subordinate administrative charges.—The whole division is divided into six ranges with 51 beats:—

Ranges.	*Headquarters.*
Kodamadi	Ambasamudram.
Kannikatti	Do.
Kuttalam	Kadayanallur.
Srivilliputtur	Srivilliputtur.
Nanguneri	Sivanaperi.
Srivaikuntam	Srivaikuntam.

Cost of administration—

	Rs.
Pay of—	
Officers	7,700
Rangers	11,008
Subordinate staff	15,417
Clerical staff	9,013
Menials	980
Temporary staff	629
Allowances	7,044
Contingencies	3,171
Total ...	54,962

Cost under other important heads—

8. (*b*) Forest Conservancy, maintenance and regeneration—By Government agency—

	Rs.
Timber	5,950
Sandalwood	346
Forest produce removed by consumers and purchasers	6,890
Renewals and replacement of stores	294
Roads and bridges	4,500
Buildings	3,597
Other works	123
Maintenance of boundaries	3
Regeneration	301
Fire-protection	439
Other works	236
Miscellaneous	310
Total ...	22,989

52. A. Capital—

Purchase of stores	1,555
Sowing and planting	2,640
Roads—New works	1,627
Total ...	5,822
Grand Total ...	83,773

Income from main sources—

	Rs.
By Government agency—	
Sandalwood	1,763
Timber	8,697
Firewood	4
By private agency—	
Timber	30
Firewood and charcoal	90,391
Bamboos	1,920
Grazing	8,426
Other minor produce	13,468
Miscellaneous	12,365
Total ...	1,37,064
Receipts from unreserved lands	27,300
Total ...	1,64,364
Deduct—Refunds	90
Total ...	1,64,274
Surplus	80,501

Chief works done.—Departmental extraction of timber from the evergreen forests and supply of firewood, and of sandalwood from the Alagarcoil valley, on a fairly large scale, through the agency of contractors are amongst the most important works. The large scale palmyra planting in Kudiraimoliteri reserve to fix the movement of the shifting sands and to form a valuable crop for the future is another work of importance in the division. Two hundred and forty-nine broad gauge sleepers and one hundred and fifty-two metre gauge sleepers were supplied to the railway during the year.

Tanjore.

Description.—Same as reported in 1929-30.

Area.—Ten square miles of which six are in Class I.

How the two reserves are administered.—These two reserves are administered by the Revenue Divisional Officer and the Tahsildar under the technical advice of the Conservator of Forests, fifth Circle. The regular forest staff consists of a forester and three forest guards.

	Rs.
Cost of administration—	
Pay of officers—	
Pay of subordinate staff	1,100
Allowances	237
Contingencies	50
Total ...	1,387
Cost under other important heads—	
8. (*b*) Forests—	
Coupe watchers	417
Buildings	120
Other works	82
Total ...	619
Grand Total ...	2,006
52. A Purchase of stores	96
Income from main sources—	
By Government agency—	
Firewood	...
By private agency—	
Timber	9
Firewood	480
Grazing	336
Other minor produce	2,865
Miscellaneous	5,334
Total ...	9,024
Revenue from unreserved lands	6,961
Total ...	15,985
Add—	
March final adjustment	1,101
Total ...	17,086
Surplus ...	14,984

Chief items of work done.—Besides general protection of the area and maintenance of buildings, fuel coupes are worked on contract.

VALPARAI SLEEPER PROJECT.

	Quantity.	Rate.	Amount.
	C. FT.	RS. A. P.	RS. A. P.
Cost of production of B.G. and M.G sleepers at Pollachi—			
Felling, conversion and sawing charges.			
B.G. sleepers	10,850	2 8 2·7	27,276 6 0
M.G ,,	4,968	1 4 2·4	6,271 7 0
Carting B.G ,,	14,073	2 1 5·1	29,381 11 0
M.G. ,,	4,874	0 15 11·4	4,859 0 0
Overhead charges B.G ,,	10,850	1 6 2·8	18,530 0 0
M.G. ,,	4,968	0 11 1·4	
			86,318 8 0
Cost per B G.	..	5 15 10·57	..
,, M.G.	..	2 15 3·2	..
Sales.			
Sales at Pollachi—			
B.G. I class	12,469	8 4 0	1,02,869 4 0
II ,, ...	497	5 8 0	1,083 8 0
M.G. I ,, ...	2,717	3 0 0	8,151 0 0
Rejected sleepers in the forests	..	..	60 0 0
,, ,, at Pollachi B G.	1,174	..	2,397 11 0
M.G.	130		
Red cedar scantlings No. 1934	..	..	2,901 0 0
Do. 170 c.ft. at Rs. 2 a c.ft.	..	..	340 0 0
			1,17,802 7 0

COIMBATORE,
31*st August* 1931.

K. R. VENKATARAMANA AYYAR,
Acting Conservator of Forests, Fifth Circle.

ANNUAL ADMINISTRATION REPORT OF THE FOREST DEPARTMENT

FOR THE

YEAR ENDING 31ST MARCH 1931.

SIXTH CIRCLE

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

1. (i) *Reserved forests.*—The total area at the commencement and at the end of the year was 1,914 square miles.

(ii) *Reserved lands.*—The total area at the beginning and at the end of the year was 34 square miles.

2. Forest Settlement.

2. No area was finally settled during the year.

Of the five blocks notified under section 4, settlement is proceeding. In the case of two blocks (namely Kinnanur and Eleri) proceedings were incomplete at the close of the year. In the case of three blocks, namely Panathadi, Aletti East extension and Painikarai draft section 16 notifications have been submitted.

3. Demarcation.

3. Nine miles of new boundaries were demarcated during the year, eight miles in the Wynaad division (parts of Ladysmith and Kartikulam reserves and Kallur reserve). One mile was demarcated in the Nilgiris in connexion with disafforestation in the previous year.

The reclearing of boundaries was, as usual, done by subordinates free of cost in all divisions except Wynaad and Nilambur. The year's programme of inspection of political frontiers was carried out.

4. Forest Surveys.

4. (*a*) *By the Survey of India Party.*—Nil.

(*b*) *By the Madras Survey Party.*—The party continued its work in the South Mangalore division.

The survey of coupes, regeneration areas, plantations, etc., was undertaken departmentally.

The reference maps were maintained.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

Preparation and control of working plans.

5. *Preparation.*—A revised working plan for the North and South Mangalore divisions continues under preparation by the Working Plans Officer: so also the preparation of a plan for the ghaut forests of Wynaad division. For the hill areas in the New Amarampalam reserve of Amarampalam range, Nilambur, a reconnaissance report has been prepared by the District Forest Officer. In the Palghat division, the preparation of a regular plan for the Chenat Nair, Dhoni, Silent Valley and Attapadi reserves is in hand. A revised working plan for the Thadagam, Anaikatti and Bolampatti Block III reserves is pending sanction.

A scheme for Hopea propagation in Udipi range was accorded the Conservator's sanction. A revised scheme for the working of fuel forests of Coondapoor range, North Mangalore division, drafted by the District Forest Officer is to be included within the working plan that the Third Circle are preparing.

Control.—The prescription of the existing working plans and schemes were generally followed. Deviations that occur receive proper sanction.

2. Communications and Buildings.

6. *Roads and bridges.*—The total expenditure on 'Capital works' was Rs. 15,065 against Rs. 8,383 in the previous year. Expenditure on repairs was Rs. 21,702 against Rs. 23,504 in the previous year.

The important new works of the year were:—

	Rs.
1. Completion of improvements to Boothakkal-Bavali road, Wynaad division	4,352
2. Part construction of a road from Kunhiracadava to Mancheri	3,169
3. Improvements to the road from Nadupatti to Varlapadi Coupe IV	2,420

Seven hundred and sixteen miles of roads and bridle-paths and inspection-paths were maintained at a cost of Rs. 21,702. All roads in the Circle were properly cared, and have been kept in good repairs. An exception is the bridges in the Benne-Mudumalai road of the Nilgiri division. These were not fully reconditioned during the year.

7. *Buildings.*—Rupees 30,832 were spent on capital works against Rs. 23,138 in the previous year and Rs. 14,084 were spent on repairs against Rs. 14,613 in the previous year.

The increase under capital works was chiefly in Wynaad and Palghat. The small decrease under repairs is due to restricting expenditure to essentials.

The important new works were :—

	Rs.
1. Foresters' quarters at Goonadka, South Mangalore division	1,311
2. Completion of the Assistant Veterinary Inspector's quarters at Nilambur	1,709
3. Construction of quarters for two clerks and two foresters at Nilambur	6,573
4. Construction of forester's quarters at Beypore	1,360

8. *Other works.*—Rupees 4,829 were spent on new works against Rs. 521 in the previous year. The increase was in all the divisions except the Nilgiris.

3. Protection of Forests.

(a) *General protection.*

9. The following statement compares the total number of forest offences during the year under report with that of the previous year :—

Cases.	Fires.		Felling.		Grazing.		Other offences.		Total.	
	1929-30	1930-31.	1929-30.	1930-31.	1929-30	1930-31.	1929-30.	1930-31	1929-30	1930-31.
A. Taken into Court.	21	62	154	112	41	21	66	16	282	211
B. Compounded ..	137	79	846	788	194	247	324	346	1,501	1,460
C. Undetected ..	109	233	2	..	..	..	..	..	111	233
Total ..	267	374	1,002	900	235	268	390	362	1,894	1,904
In Reserves	130	257	570	523	235	268	354	313	1,289	1,361
In Unreserves ..	137	117	432	377	..	..	36	49	605	543

So far as totals were concerned, there was no appreciable increase.

The increase of reserve cases had to do with fires and grazing.

North and South Mangalore and Palghat divisions had numerous fires owing to a long hot weather The increase under grazing cases was slight, and occurred in the Nilgiris. This was attributed as usual to better protection. Under ' Unreserves,' there was a small increase under ' Other offences.' The reason is not known.

10. *Sandalwood cases.*—In North Mangalore, nine cases were detected, of which five related to breach of Sandalwood Transit Rules and four to sandalwood theft. Of the former, four cases were compounded and one was pending in court; of the latter, all were prosecuted; two of them ended in conviction, one in acquittal and one was pending in court.

In South Mangalore division, there were two cases of transport of sandalwood without permits and they were pending enquiry at the end of the year.

In the Nilgiris, there was only one case of illicit cutting of sandalwood in the Sigur range. It was prosecuted and the case ended in conviction.

11. The percentages of cases detected in reserves and enquired into by Range Officers and District Forest Officers respectively are given below with the total number of cases involved, for comparison :—

District.	By District Forest Officer. PER CENT.	By Range Officer. PER CENT.	Total cases.
North Mangalore ...	2·68	16·07	305
South Mangalore ...	2·2	25·00	352
Wynaad	3·0	30·00	33
Nilambur	6·6	40·00	15
The Nilgiris	0·42	3·2	469
Palghat	1·1	9·6	187

Offences that were not enquired into were generally of such a simple nature as not to need investigation.

Of the 912 cases in reserves prosecuted in courts, 49 cases ended in conviction and 43 in acquittal. Of the cases acquitted, 34 were settled by payment of compounding fees in courts. Prosecutions were successful in 90 per cent of the cases. The amount of compounding fees realized was Rs. 15,013 against Rs. 18,345 in the previous year. The average compounding fees realized were Rs. 10–8–0 per case and Rs. 5–9–0 per person.

12. *Patrol system.*—In the Nilgiris, patrol parties were organized thrice during the year. Patrol party was on this special duty for several weeks at a time. In all, 24 offences were detected. In other divisions, it is reported that there was thought to be no need for organizing such special patrols. In Bolampatti range of Palghat division, however, the present District Forest Officer desires to try special patrols in 1931–32.

13. *Rewards.*—In the North Mangalore division, a reward of Rs. 60 was granted to four persons for detecting a sandalwood smuggling case. In the South Mangalore division, Rs. 40 was granted in rewards in bamboo-theft and grazing cases.

(*b*) *Protection from fire.*

Special protection.

14. The period dealt with is the calendar year 1930.

Early-burning—North Mangalore division:—Early-burning was done only in ghaut forests. The area dealt with was 3,455 acres against 7,103 acres in the previous year: early-burning was not undertaken in Udipi range. It was decided that it was of little use to the surrounding forests which are more or less evergreen and not exposed to danger from fire. The system did not meet with any opposition from the ryot population. There was no fire in the early-burnt tracts.

Wynaad.—Early-burning was confined to Kannoth range. The area concerned was 47,935 acres as in previous year. Rupees 78 was spent on the work. The result was satisfactory as there were no fires in the early-burnt tract.

The only other early-burning done was on grassy hills of Tirunelli and Hilldale reserves. One thousand acres in Tirunelli and 900 acres in Hilldale reserves were dealt with at a cost of Rs. 60. Part of the protection of these two reserves was by clearing and burning of fire-lines at a cost of Rs. 575–4–0. There were no fires in these reserves.

The system of protection by cleared lines and patrols continued in other parts of the Circle. In the Wynaad division, guide lines three feet wide were cut parallel to the Coorg and Mysore frontier and about 100 yards from it; and the intervening strip was burnt.

The Nilgiris.—The operations in the specially protected areas were according to the working plan. Results in the Mudumalai range were not satisfactory, and the proposals for modifying the system were approved by the Chief Conservator in his Proceedings No. 513, Press, dated 7th October 1930. The area specially protected increased from 1,242 square miles to 1,246 square miles.

The area protected successfully during the year was 97·4 per cent against 96·7 per cent in the previous year. Twenty thousand one hundred and sixty-five acres were burnt against 25,100 in the previous year.

The average cost of special protection was Rs. 11–14–0 against Rs. 10–3–0 in the previous year. The cost of early-burning was Rs. 10 per square mile in North Mangalore division and Re. 1–0–8 in Wynaad division. The lowest rate for protection under the old method was in South Mangalore division, viz., Rs. 4–1–0 per square mile and the highest was Rs. 29–9–0 in Nilambur.

General protection.

15. The area under general protection was 441,063 acres and the area burnt was 9,844 acres.

(c) Protection against cattle.

16. The area closed to grazing decreased from 331 square miles to 330 square miles. Three square miles of fuel and catechu coupes in North Mangalore division were opened to grazing; and two square miles of area of new plantations formed and new areas for timber extraction felled in 1930–31 in South Mangalore division were closed.

In Nilambur, the entire forest is closed to grazing. Stray cattle from the adjoining villages continue to do damage to young plantations; however cattlepound arrangements have been improved so as to cope with the problem.

The area closed to grazing of all animals was 330 square miles: 17 per cent of the total area of reserved forests and lands. The area open to grazing of all animals (except goats) was 82 per cent; and that open to all animals except goats and sheep was 1 per cent.

The number of animals licensed to graze on payment was 123,494 against 121,004 in the previous year. The increase was due to the increase in the number of cattle brought to Kulgunda cattle fair in South Mangalore.

The incidents of grazing in terms of acres per cow unit as reported by the District Forest Officers was :—

	Acreage per cow unit.	
	1929-30.	1930-31.
North Mangalore	9·7	10·2
South Mangalore	5·8	5·9
Wynaad	13·0	14·0
Palghat	12·2	14·1
The Nilgiris	5·0	5·0

The number of cattle impounded increased from 1,072 to 1,410. The increase was chiefly in the Nilgiri division.

(d) Protection against injuries from natural causes.

17. *Weeds and climbers.*—In the North Mangalore division, climbers were cut in the timber coupes at the time of marking trees for felling. Hopea plants in Someshwar, Jatkatmale and Halesomeshwar and other reserves were freed from climbers during tending operations.

South Mangalore.—Measures against climbers, weeds, etc., were confined hitherto to regeneration areas; but this year the reserves were brought under a systematic programme which divided each guard's beat into five annual portions. The beat guards were made responsible for this work, which was done free of cost.

Nilambur.—Climbers in plantations were cut under the working plan. There was likewise clearing of Loranthus.

Palghat.—Weeds and climbers were cut in coupes about to be felled and in areas under regeneration.

Lantana.—In Wynaad, lantana was uprooted in plantations and around all buildings. Burning of lantana in a test area was also carried out to see if successive annual burning will kill it. This was discontinued after the close of the year as it was doing more harm than good to the forest concerned.

Insects—Wynaad division.—While marking the 1904 plantation in Begur range for thinning, some dead and dying teak trees were observed. Two of these trees had new epicormic shoots close to the ground and healthy leaves on the epicormic branches. The stems concerned had been affected by beetles.

A few insects, two pieces of the bark, and segment of the stem were collected from the apparently dead tree and sent to the Forest Entomologist, Dehra Dun, for identification. The Forest Entomologist identified the borers of *Xyleborus butmali* (the largest), *Xyleborus kratzi*, *Xyleborus noxious* and *Xyleborus semigranosus*. The matter was thoroughly investigated. The conclusion arrived at was that a group of trees had been first injured by lightning; and that the beetle-attack had come subsequently, affecting dead-wood.

Nilambur.—Mapping of defoliated areas by a speical duty forester (who reports to the Forest Entomologist, Dehra Dun) was continued during the year.

In December 1930 in the Nilgiris, severe frost destroyed most of the *Eucalyptus pillularis* plants that had been put out in Coupes IV and V, Brooklands. Severe wind during monsoon also

did some damage to the bluegum plantations. The spike-disease attack in sandal trees, which broke out in 1928 in a portion of Sigur reserved forest, continued. It spread to Bukapuram reserved forest. Steps were taken to safeguard dead sandal trees in the affected areas.

Damage by animals.—In the Wynaad division, pigs continued to damage young plantations. A pig stockade was constructed at a cost of Rs. 66 and attempts to catch pigs were made in Begur plantation, but with very poor results. Government muskets were employed to some extent to mitigate the nuisance.

In Nilambur, wild elephants caused very considerable damage to some young plantations of Amarampalam range especially those of 1929 and 1930. Pigs did damage in a small plantation of the second rotation in Amarampalam range. Monkeys also are in the habit of running up teak stems in very young plantations, and snapping off the tops. This occurs a good deal in Nilambur range. In such young plantations the damaged stems were cut back; but this is expensive, and the monkeys are a veritable nuisance.

In the Mudumalai range of the Nilgiris, damage done by wild elephants in teak plantations was also considerable. Deer (together with grazing animals) destroy completely all sandal regeneration that is not protected by thorny bushes in the *sandal-wood* areas of Sigur range.

In Palghat, occasional visits of wild elephants did some damage to the regeneration; and elephant herds in Kalladikot forest were an affliction to the woodmen and sleeper sawyers.

CHAPTER III.—SYLVICULTURE.

(i) Afforestation and Regeneration of Forests.

(1) *General progress of areas under regeneration.*

18. *North Mangalore.*—Good results are reported in respect of sowings of *Hopea*, *Artocarpus hirsuta* and *Vateria indica* in Someshwar, Jatkatmale and Halesomeshwar reserves.

Regeneration by coppice in fuel and catechu coupes is characterized as fair.

South Mangalore.—All regenerated areas are in satisfactory condition.

Wynaad.—Regeneration under the new working plan was commenced during the year. Sandal with dhall as a temporary host-plant was raised in a ragi ponam crop.

Nilambur.—Regeneration was undertaken over 280 acres—198 acres with teak, 24 acres with broad-leaved mahogany, 26 acres with rosewood, 15 acres with *Artocarpus hirsuta* and *integrifolia*, 4 acres with *Hopea parviflora* and 13 acres with *Terminalia tomentosa*. The progress of works of the year was retarded by the cyclonic heavy rain in May 1930. The monsoon also proved an irregular one. The largest area, namely, at Nellikutha, 150 acres, could not be stocked completely owing to the short period of good planting weather available.

The 1930 teak plantation in Ellenjeri, where planting was completed on the first day of the monsoon, has turned out admirably. The stocking at the end of the hot weather of 1931 was 97 per cent and the rate of growth excellent.

The plantation work with mahogany failed, likewise *Terminalia tomentosa* and *Artocarpus*. Rosewood and Hopea were successful. The regeneration areas of 1929 are making good progress.

Between 1921 and 1928 the second rotation plantations were disappointing; and it began to be believed that some serious disability was attached to ground that had supported for a rotation a pure crop of teak. As a result of planting experience gained in 1928 and onwards the above view no longer obtains. The improved planting that is now the order of the day owes something to the work of the Third Circle (Research), and a great deal to the present District Forest Officer whose energy and ability merit high commendation.

The Nilgiris.—*Eucalyptus globulus* plantations in Ootacamund and Coonoor ranges continue satisfactory.

The plantations of *Eucalyptus pillularis* in Compartments IV and V, Brooklands, were set back by frost again; and blanks have to be filled with *Eucalyptus globulus*.

Palghat.—The development of coppice and young regeneration continues satisfacatory. Good results are to be seen in the teak plantations in Elival and at Walayar.

(ii) *Reproduction under working plans or schemes.*

Mainly natural.

19. *The Nilgiris.*—There is profuse natural reproduction of *Calitris* in Aramby and Cairnhill. *Acacia dealbatta* comes freely from root suckers in the plantations. In Cairnhill Block I, Cypress regenerates itself. There is but little natural seedling reproduction of bluegum in the felled coupes of Aramby and Governorshola.

Mainly artificial.

20. *Wynaad—Begur range.*—The area dealt with was 75 acres. In this area the marketable timber was felled in 1928–29. 'Unmarketables' were cut and burnt, partly in 1929–30 and partly in 1930–31. Teak seeds, soaked in running water for 48 hours were dibbled in April 1930, twelve seeds at each stake. Germination was poor and there was such extensive damage by the cyclonic rains of early May that the whole area had to be planted up with teak stumps. Weeding was done in May, June and July 1930. Grass was cut twice with knife and patch-weeding was done. Ultimate results were 78 per cent stocking. Half an acre in this area was sown with hill paddy; but the stocking of the area was unsatisfactory. The cost of all items of work worked out at Rs. 48 per acre.

Chedleth range.—Area dealt with was 77 acres. The marketable timber was removed from the area in 1928–29, unsaleable timber felled and burnt between February and May 1930 and teak stumps one year old were planted out in June 1930, in crowbar holes. A 'ponam' area of about fifteen acres was cleared thoroughly and all small roots were grubbed out by the cultivators. (First weeding and lantana uprootal was done between the middle of July and August 1930 during which period casualties were also replaced. Second weeding, consisting of grass-knifing, patch weeding round seedlings, and soil working, was done from September to December 1930 and third weeding done in December 1930.) Stocking by April 1931 was 84 per cent.

This plantation is said to be the best raised in the range up to date. Success is attributed to use of large plants for stumps, and to comparative early planting. The cost was Rs. 68 per acre.

A new sandal plantation of 1·4 acres was formed in a crop of ragi. The sandal seeds were sown together with dholl. The ragi yield was poor, but 75 per cent of the sandal seedlings survived. The expenditure incurred was Rs. 107, set off to some extent by the ragi harvest.

In Begur range, in Balegole, an area of 28¼ acres was cultivated by Kurumbars, 24½ acres were planted with teak stumps, and 4 acres were sown with sandal. The percentage of survival in the teak area was 56. In the sandal area, sandal and dholl were dibbled side by side. Erythrina seeds were put down at alternate stakes in alternate rows. The survivals of sandal amounted to 30 per cent. Our expenses over the whole area of about 29 acres were at the rate of about Rs. 4 per acre

The following works were carried out in selection coupes :—

In Selection Circle coupes, openings in the forest, where trees had been felled, were regenerated on the lines prescribed in the working plan, so-called ' tunnel ' or ' patch ' regeneration.

Begur range.—In Selection Coupe I, 68 patches were made. Of these, three were dibbled and three broadcast with *Terminalia tomentosa*, one patch was dibbled with *Pterocarpus marsupium*, and one with rosewood. Two patches were broadcast with rosewood and with *Pterocarpus marsupium* respectively. Fifty-five patches were planted with teak stumps and three with rosewood stumps. Into five patches that had been dibbled with *Terminalia tomentosa*, *Pterocarpus marsupium* and rosewood, teak stumps were also introduced. A few of these stumps were damaged by wild pigs. *Terminalia tomentosa* was a complete failure. Rosewood and *Pterocarpus marsupium* came up fairly well. The cost was slightly under Re. 1 per patch.

Chedleth range.—Patch regeneration of Coupe II, Pavagaddai, was also carried out.

Fifty patches were selected, burnt and planted with teak, *Pterocarpus marsupium* and rosewood seedlings. Ninety per cent of the seedlings survived. Teak did specially well attaining to an average height of 2½ feet. Practically no weeding was necessary in these patches, owing to thorough burning before planting. In several patches, natural regeneration of *Adina cordifolia* was noticed and was allowed to remain. The cost however was high : about Rs. 2–8–0 per patch.

In Coupe I, fifty patches were dibbled with teak at a cost of only two annas per patch : but it has not been reported how far this operation was attended with success.

Nilambur division—Nilambur range—Plantation working circle.—Ellenjeri Compartments 42, 43 and 44 (part) clear-felled in 1929–30, area 40·4 acres, and depot sites in Compartments 81 of Edacode and 41 of Ellenjeri, area 4·5 acres, totalling 44·9 acres (all of the second rotation) were regenerated during the year by planting teak seedlings 6 feet by 6 feet in 40·9 acres and dibbling teak seeds 6 feet by 6 feet after pitting in the balance area of four acres. The dibbling was done in the middle of May.

The result was so poor that the dibbled area was planted, on 20th June, along with the main area, which had not been dibbled.

Casualties were replaced in June-July and August, but very little replacement was found necessary, at any time. The area was weeded three times. The first weeding which consisted of cutting weeds and scraping with mamuties in 4 feet strips (2 feet on either side of the plant rows) was done in July-August; the

second weeding was done in September-October, and consisted of digging with forked mamuties, 2 feet on either side of the plant rows. Heads of small plants were freed and climbers and coppice shoots cut in March 1931.

The expenditure was Rs. 42 per acre; and 97 per cent success was achieved.

Hopea parviflora was planted under the existing crop in the following sub-compartments of the Miscellaneous Felling Series :—

	ACS.
Panangode 123 (*m*)	0·5
Walluvasseri 152 (*m*)	3·6
	4·1

The planting was done at an espacement of 9 feet by 9 feet in June-July with plants from the nursery raised in 1929. Casualties were light.

In the area planted in 1929, over 46·2 acres in Panangode, Walluvasseri and Old Amarampalem, casualties were replaced in June-July. In all, 9,971 plants were put out during the year, both by way of original planting and replacing casualties. Climbers were cut and heads of plants were freed in March 1931. The expenditure was about Rs. 1–8–0 per acre.

Compartments 236-*a*, *m* and 239-*m* of Old Amarampalam were regenerated, together 29·3 acres. 28·1 acres were leased out for ponam cultivation. Clearing and burning were done by the ponamdars at their expense. The balance area of 1·2 acres was dealt with departmentally as no cultivator wanted it.

Teak stumps were planted over 3·6 acres and rosewood in the rest of the area, the espacement being 8 feet by 8 feet in both the cases. Rosewood stumps were used generally; but where seedlings large enough for stumping were not available, seedlings were planted, two at each stake. Casualties were replaced in July-August-September. In the ponam area no weeding, other than pressing the paddy back, was done. After paddy had been harvested, weeds and paddy stalks were uprooted in 3 feet diameter circles round plants. Climbers, bamboo shoots, etc., were cut in November 1930. In February 1931, survivals amounted to 83 per cent. There is also considerable natural regeneration of *Xylia xylocarpa*. The expenditure was Rs. 15 per acre.

In Compartments 34-*m*, 35-*m* and 37-*m* of Ellenjeri, 15·2 acres where teak of the second rotation had failed (1926 work), lines were cleared through the undergrowth, 8 feet apart, and were staked

8 feet by 8 feet. Stumps of *Artocarpus integrifolia and hirsuta*, and seedlings of *Artocarpus hirsuta* were planted in the undergrowth one foot away from the cleared line. Casualties were replaced in August and enumeration then showed only 57 per cent; but 1930 monsoon was exceptionally bad.

Near Nedungayam, Compartment 321-*d*, *e*, *f* of Karimpoya, a 1908 plantation that had been almost a complete failure was clear-felled in 1929–30. The area, 16 acres, was regenerated in 1930 by dibbling teak seed in pits 6 feet by 6 feet. The dibbling was done between 12th and 15th May. Germination was poor and casualties were replaced in July 1930 with teak plants and again in August-September with teak stumps. The expenditure was Rs. 39 per acre.

The results were poor both as regards stocking and growth; and this was due to poor germination of seed, a poor monsoon, which stood in the way of successful planting of blanks, abnormal weed growth, and also very extensive damage by pits. The latter uprooted large number of plants while feeding on the roots of a grass (*Cypreus rotundus*), which attracted them.

Conversion Working Circle—Nilambur range.—In Panangode, on 24·7 acres marketable timber had been felled in 1929–30. The undergrowth was cleared in 1930; and under the shade of the unmarketable trees mahogany seeds were dibbled 8 feet by 8 feet, six seeds being put at each stake. Casualties in the dry weather were heavy. Survivals were only 26 per cent. The expenditure was Rs. 18 per acre.

15·4 acres of natural forest in Old Amarampalam, felled in 1929–30, were regenerated. 3·4 acres were clear-felled and dibbled with teak, 6 feet by 6 feet, in early May. On the rest of the area unmarketables were left to afford shade, undergrowth was cleared and burnt, and *Terminalia tomentosa* seeds were dibbled at stakes, also in early May.

The germination of *Terminalia tomentosa* was only 30 per cent. Teak however was good, and the area was fully stocked.

Blanks in the *Terminalia tomentosa* area were planted up in July and in two small plots on high ground rosewood was planted. Casualties were heavy in the hot weather and survivals amounted only to 63 per cent. The expenditure was Rs. 32 per acre, including the teak; but for the *Terminalia tomentosa*, it was about Rs. 17 per acre.

Amarampalam range.—145·9 acres in Nellikutha, felled in 1929–30, were regenerated. Teak seeds were dibbled over 100·6 acres

during April and May. In the remainder of the area, seedlings were planted between 16th and 25th June 1930. Owing to heavy showers at Nellikutha, planting was started a few days before the real commencement of the monsoon. Blanks and casualties were replaced with teak plants or stumps where the weather conditions appeared to be favourable in July, August and September. A knife-weeding was done in June-July and again in August where necessary. The " second weeding " began on 20th August and it consisted of digging with forked mamuties and uprooting weeds in 4 feet diameter circles. Owing to heavy weeds and labour difficulties, only 33 acres had been gone through according to the above method by the end of October. In the meanwhile, weed had overgrown the rest of the plantation and plants were being smothered. Weeding with forked mamuties was therefore stopped, and knife-weeding substituted. The work was completed by the end of November. The area that had been weeded with forked mamuties became so overgrown that a knife-weeding had to be done in December. On the whole the percentage of success was 80; and the growth is better than usual. Full stocking could not be achieved: the area was too large to stock fully in the short period of good planting weather that occurred at the commencement of the monsoon. The expenditure was Rs. 56 per acre.

The Nilgiris.—In 1929, marketable timber had been felled on 30 acres in the Mudumalai forest and regeneration of this coupe was undertaken in 1930. Twenty-two and a half acres were cleared and regenerated with teak stumps in combination with ponam cultivation. There were heavy rains at the harvesting season, and an indifferent crop of ragi (56 pallas) was obtained. The remaining 7½ acres were regenerated with *Terminalia tomentosa*, *Pterocarpus marsupium* and rosewood under partial shade. An area of 5 acres, left over from 1929–30, was also taken up and planted with *Terminalia tomentosa* and rosewood. In all, 22½ acres of teak and 12½ acres of miscellaneous species were regenerated at a cost of Rs. 37 per acre.

In Coonoor range, 12 acres in Tigerhill reserve that had formerly been handed over to the Industries Department for sericultural experiments, were handed back to the department with but a scattering of scrub growth remaining on it. It was therefore planted up with bluegum in 1930. This work was unsuccessful however: the plants started well but perished later owing to drought, which in its turn was due to exposure.

In Coonoor range, Compartment 26 of Coonoor Peak and Compartment 1 of Bleakhouse, that had contained Callitris and Acacia, were converted to bluegum and *Eucalyptus pillularis* respectively.

In Ootacamund range, in Cairnhill and Aramby two blocks, amounting to about 6½ acres were converted very successfully from *Frenella into bluegums*. The cost amounted to about Rs. 11–8–0 per acre.

Sandal sowings.—Five acres were clear-felled for sandal regeneration at the fourth mile, Kakkanhalla-Gudalur road. However, owing to a misunderstanding, an area of 24 acres at Teppakadu was cleared by the Kurumbars. To make the best of the situation it was decided to raise sandal with field crops. The results have been extremely interesting and up to a point, successful.

Sandal seeds were dibbled at stakes, 12 feet by 12 feet; and with the sandal seed of dhall was also sown. On the area, the Kurumbars raised a crop of ragi. They lived in the field and so protected their ragi, as well as our sandal and dholl. The latter have been extremely successful, where they have escaped the attentions of game. There survive sandal at 40 per cent of the original patches. Cuttings of *Jatropha* and of *Erythrina* have been inserted adjacent to the sandal, as hosts; and regrowth of many tree-species is appearing from root-suckers, etc. We cannot afford to fence and protect the area adequately; so the sandal is likely to be destroyed, except where weed-growth may hide it.

In Sigur range, the 1929 sowings of sandal were a thorough failure. Twenty-five acres were taken up during 1930. Seeds were dibbled during the first week of June 1930. Germination was poor. In August 1930, 2,460 seedlings raised in a dump were planted in the area but most of these died since. No success can be considered to have been achieved. Drought is a difficulty in Sigur range; and game and cattle, that browse sandal for preference over (as far as is known) any other growth, are the final obstacle.

In Benhope No. II reserve of Coonoor range, resowing of sandal was done over 25 acres first sown in 1926–27. Sandal and dholl were sown together.

Palghat division—Palghat range.—In Walayar reserve, 106 acres of forest had been clear-felled in 1929. Of this, 15 acres were handed over to the Third Circle for research work. In 1930, 41 acres where natural reproduction and coppice reproduction were not sufficient were planted with teak stumps, at 9 feet by 9 feet espacement. When in June 1931 replacement of casualties was being done, there were 54 per cent of survivals from 1930. The expenditure on the 41 acres planted was Rs. 21 per acre, for the first year's work. That the first year's work was not more successful was due to unsatisfactory monsoon conditions.

The remaining 50 acres which was producing good coppice growth of teak and other acceptable species was tended at a cost of Rs. 5 per acre. The cost of tending in the previous year had been Rs. 3–6–0 per acre; and the increase in 1930 was due to thick bamboo regrowth which had to be cut and recut several times.

The Walayar teak-planting operations began in about 1926, and have settled down to a routine. Tolerable plantations (compatible with a very third-rate teak locality) are being established. Their importance lies in the situation: on the railway-line close to Coimbatore town.

Bolampatti Ponam Working Circle—Coupe V.—Twenty-eight acres felled in 1929 were cultivated in 1930 by Irulars. They cleared the area and made bunds 12 feet apart; and on these we notched germinating teak seeds from dumps, and elsewhere dibbled *Terminalia tomentosa*, *Albizzia* and *Odoratissima seeds*. Eleven acres of teak and 17 of the other species were regenerated there; and weeding was done by Irulars. Departmental expenditure was Rs. 6 per acre.

The 1930 monsoon was poor however and there were hot spells of dry weather which proved fatal to the young teak. *Albizzia* was quite successful. *Terminalia tomentosa* germinated badly. This was the fifth coupe that has been regenerated by the above method; and up to 1930 results have not been too encouraging: the areas where artificial regeneration fails become well clothed with mixed coppice regeneration and natural rosewood in places: but only partial success has been achieved in artificial regeneration.

In the coupe of the previous year, the interspaces between the 12 feet apart bunds were filled to 4 feet by 4 feet spacing chiefly by stump planting of teak and the other species. The 1930 season however was adverse. Expenditure was Rs. 9 per acre.

21. *Afforestation.*—Nil.

(iii) *Plantation and other forms of regeneration not under working plans or schemes.*

22. *North Mangalore.*—In Someshwar reserve 65 acres were sown up very successfully with Hopea 9 feet by 9 feet. Expenditure was Rs. 6 per acre. In Halesomeshwar reserve, 7 acres of Coupes VI to VIII on which a fire had occurred were resown with Hopea, 12 feet by 12 feet, at a cost of Rs. 4 per acre.

In Someshwar reserve Coupe V, 30 ' gaps ' or ' funnels ' or ' patches ' amounting to 4½ acres were selected. They were dibbled with teak, Xylia and rosewood seeds at an espacement of

4 feet by 4 feet. The total expenditure was at the rate of Rs. 27 per acre of actual patch regenerated: or thirty patches at Rs. 4 each. The percentages of success are reported to have been—

Rosewood	11
Teak	50
Xylia	20

and presumably the count was done after the expiry of the 1931 hot weather, though this has not been stated.

South Mangalore division.—Thirty acres in Coupe V, Parappa, clear-felled and burnt in 1929 were sown with teak in 1930, 6 feet by 6 feet. This area was not considered fit for Hopea, but is well suited for teak. Casualties were replaced by use of germinating seeds from a dry nursery. The sowing was done in May and June 1930. Survivals by March 1931 were 79 per cent and expenditure was Rs. 30 per acre.

In Sampaje reserved forest, an area of 26½ acres clearfelled and burnt in 1929–30 was regenerated with teak, on similar lines. Expenditure was Rs. 38 per acre.

Another 4-acre area in the same reserve was regenerated by sowing in May and by filling blanks by planting in June and July, at a cost of Rs. 43 per acre. It is reported that the 1929 teak plantation (our first venture with teak planting in this locality of recent years) is doing very well.

Mujur reserved forest.—Over 23 acres on the northern slope of Coupe I, Hopea seedlings were planted in wide strips. The espacement of the plants was 9 feet by 9 feet. In the rest of the area, over 132 acres, in gaps where trees had been felled, Hopea transplants were put out at 9 feet intervals. The cost was under Rs. 2 per acre.

During June and July 1930, strips 1, 3 to 5 of Aletti coupe of 1929 where natural regeneration was absent were sown with Hopea and *Artocarpus*. Casualties were replaced with seedlings. The result was a success, failures being under 5 per cent. All the natural regeneration throughout the whole area was tended. Tending included climber cutting and a thinning of the ' middle-storey ' tree growth so as to admit additional light. No tending of Hopea areas in Jalsur and Parappa reserves was found necessary: they are described as thriving.

Wynaad division.—In the Peria reserve regeneration of gaps, formed in the course of fellings for sleeper extraction, was undertaken during the year. This was the principal sylvicultural work.

In the 1925, 1927 and 1929 felling areas, about 75 gaps were dealt with in each.

Different espacements, 4 feet by 4 feet, 6 feet by 6 feet and 9 feet by 9 feet, were tried. *Artocarpus* seed was dibbled first, but this was not successful as the fleshy cotyledons of the seedlings attracted rodents. Casualties were therefore replaced with transplants in September 1930. They looked well during rains but did not survive the hot weather.

In February 1931, Mesua seeds were dibbled where *Artocarpus* had failed. They were found to have germinated at the beginning of the 1931 monsoon. The expenses were a little below Re. 1 per gap treated.

The District Forest Officer concludes that gaps should be regenerated as soon as they are formed as otherwise there is considerable regrowth that impedes regeneration. If this were followed out it would seem to mean restricting fellings to the rainy season. He thinks further that *Artocarpus* transplanting is more successful than sowing in situ: also that *Artocarpus* seed collected in the evergreen forest itself has greater vitality than seed brought in from the plains near by. Also that evergreen species should be relied upon, rather than *Artocarpus*, in small gaps where light is inadequate.

Natural regeneration of valuable species such as *Mesua*, *Cedrela toona*, and *Dichopsis elliptica* was found to be present to a satisfactory degree; and sleeper operations have been followed by the appearance of cardamoms, in Peria reserve.

The Nilgiris.—Two acres of grass land in Krurmund were planted with bluegum; but failed owing to late planting. Six plots of grassy land, one-fourth of an acre each, on the banks of Avalanche stream, were sown in worked patches with *Betula alnoides*. Sowing was a failure; and probably planting will be more successful. This species has been tried in the Nilgiris: is a fast grower: and produces a white wood stated by the Imperial Forest Research Institute to be excellent for three-ply purposes.

Palghat division.—Planting of teak stumps and dibbling of teak seed was continued in the Chenat Nair forest. Dhoni Fuel Series, Coupe II of 23 acres, and Elival Coupe III of 35 acres were planted, 6 feet by 6 feet. In both of these the percentage of success by June of 1931 was over 80 and the average cost about Rs. 43 per acre for the first year's work.

In gaps made in the Silent valley evergreen forest by selection fellings for sleepers, regeneration operations were carried on, as in previous years. In 1930, 700 acres of Coupe II and 40 acres of Coupe I were dealt with. The size of the gaps varies greatly of course; and as the light varies correspondingly, large gaps, medium gaps and small gaps are accorded different treatments.

In large open gaps, *Acrocarpus* was dibbled in prepared patches, 9 feet by 9 feet, 6 to 12 seeds per patch. In medium gaps, Artocarpus and Hopea were sown. In gaps very deficient in light no sowings were done; but the existing valuable natural seedlings such as Mesua, *Dichopsis elliptica* were tended.

The number of prepared patches (in which sowing was done) per gap varied with the size of the gap. One hundred and thirty-one gaps were sown with *Acrocarpus*, about ten patches per gap. One hundred and two gaps were sown with *Hopea parviflora* (about five patches to the average gap), and 92 with *Artocarpus hirsuta*.

Germination of *Acrocarpus* and *Artocarpus* was reported to have been satisfactory, the percentages of success being 93 and 80 respectively. Hopea was a complete failure; no germination at all.

Except for Hopea, the regeneration is stated to be promising. This is encouraging news, for the regeneration of the previous year had occasioned disappointment, particularly in connexion with *Acrocarpus* on the success of which we had banked heavily.

It should be understood that the artificially introduced plants are but a small minority in the gaps. These fill up rapidly with a mixture of evergreen tree-species, useful and otherwise, and with weeds of all kinds. The latter include a liberal admixture of a dangerous plant, the Devil's Nettle.

(iv) (*a*) *Tending areas under regeneration.*

23. *North Mangalore.*—Areas regenerated with Hopea in 1929 and previously in Someshwar, Jatkatmale and Halesomeshwar, and catechu areas in Baindur, Madaregudde and Honnakodlu reserves were tended. Weeding, clearing low shade and replacing casualties were done as required. Nearly 3,000 acres were dealt with at a cost of nine annas per acre.

South Mangalore.—No tending of Hopea areas was necessary as they had been tended in previous years.

Wynaad.—Tending of plantations was carried on according to programme. In Begur and Chedleth ranges, 564 and 292 acres respectively were tended. The operation included casualty replacement, grass-knifing, freeing of smothered plants, soil working, inspection path clearing, thinning, etc.

Nilambur—Plantation Working Circle.—Fifty-six acres of 1929 plantation were tended at a cost of Rs. 15 per acre. The Edacode and Ellenjeri compartments were 46 acres out of the above 56. The second-year treatment was as follows: they were clean weeded in strips in May and early June. Boga was sown along the edges of the weeded strips. The teak plants were pruned and casualties

replaced in June. Climbers were cut and small plants were weeded in September 1930. A further climber cutting and knife-weeding of small plants were done in November 1930. *Tephrosia candida* (Boga) suppressing teak was cut back in January 1931.

Casualties were replaced; the plants were weeded at a cost of Rs. 50 or Rs. 5 per acre. There was very little weed growth in the area, the soil being loose and sandy, so the usual tending done in respect of Nilambur plantations was found unnecessary in this case.

In part of Ellenjeri, 5 acres and in Edacode Compartment 57, 14 acres, where the teak crop was from coppicing the teak of the first rotation, coppice shoots were tended at a cost of about ten annas per acre.

Conversion Working Circle.—Erambadam 1929 area, 49 acres, was tended at a cost of Rs. 11 per acre. The plantation has grown well.

Erambadam 1928 area, 9 acres.—The plantation was burnt accidentally in February 1930. The plants damaged by fire were coppiced. Pruning and climber-cutting were done in June–July. Excess coppice shoots were cut back in October. The expenditure was Rs. 5 per acre.

Amarampalam range.—In the Pullimunda 1929 area, 121 acres was tended at a cost of Rs. 9 per acre. Teak plants were pruned and damaged plants cut back in April 1931. Casualties were replaced. A knife-weeding was done between July and September. There was considerable damage by wild elephants and broken stems were cut back. Despite heavy damage by elephants, the growth is very good. The area that had been regenerated under ' ponam ' cultivation and had been planted with teak stumps is the best of all.

In Mundakadava 1928 area, 85 acres, climbers were cut and damaged plants were cut back at a cost of about Rs. 2 per acre. The plantation is coming on satisfactorily.

Palghat—Weeding.—Weeding and climber cutting were done in the artificially regenerated areas in Sappal, Elival and Dhoni: Also in the Walayar plantations; and in Bolampatti Ponam Working Circle.

Clearing and climber-cutting were done by subordinates free of cost over 1,016 acres of fuel and timber coupes.

Clearing and cutting bamboo regrowth were done over 497 acres in the Pole Working Circle at Walayar at a cost of about Re. 1 per acre.

Clearing and climber-cutting in the fuel coupes was carried out according to working plan prescriptions.

(iv) (*b*) *Tending of growing stock.*

24. *North Mangalore.*—Climbers in timber coupes were cut at the time of marking trees for felling.

Tending of sandal was done by subordinates free of cost in Nujinane, Mavinaguli and Vorwady reserves, the area gone over being 2,743 acres.

South Mangalore.—Natural regeneration in Coupes I and II of Nalkur (1,030 acres) was tended at a cost of about seven annas per acre.

Natural regeneration in Jalsur East was also visited.

Nilambur—Plantation Working Circle.—Thinning, cutting climbers, clearing Loranthus and cutting of bamboos that were interfering with teak were done according to working plan over 580 acres. Thinning and cutting climbers were done in Edacode 1923 plantation over 14 acres at a cost of Rs. 33. Climber, Loranthus and bamboos injurious to teak were cut over 719 acres of Chathamborai and Old Amarampalam plantations at a cost of nine annas per acre. Loranthus on teak was cleared in 285 acres of Karimpoya and New Amarampalam reserves at a cost of eight annas per acre. Climbers were cut over 423 acres of second rotation plantations at a cost of thirteen annas per acre.

Conversion Working Circle.—Ninety-five acres in Walluvasseri 1924-A and Karimpoya 1923—young plantations—were thinned at a cost of Rs. 3 per acre. In Old Amarampalam 1926 plantation, on 35 acres climbers were cut. The 1926 *Pterocarpus marsupium* and rosewood area in the same reserve, 13 acres, had an intensive clearing. In Karimpoya and New Amarapalam, over 609 acres, climbers and bamboos were cut; and teak plants damaged by wild elephants were cut back at a cost of twelve annas per acre. Thinning, improvement felling and cutting climbers were carried out in 433 acres containing a natural pole crop of superior species in Subsidiary Coupe III at a cost of about Rs. 1–8–0 per acre.

In coupes worked for Xylia sleepers, climbers on standing growth of valuable species were cut over 888 acres at a cost of five annas per acre.

Beypore coconut tope was tended at a cost of Rs. 2,144. The operations included ploughing the tope continuously throughout the year, manuring with ash, bonemeal, lime and leaf manure. Incidentally the attention that has been given to this plantation in the last five years has completely changed its appearance. It is now a credit to the Forest Department, and to the Agricultural Department who have been extremely helpful in advising us.

The Nilgiris.—In Coonoor range, sandal Coupe VI of 81 acres was tended. In Sigur range, tending was done in Coupes V and VI in those portions where the stock is dense. Climbers on sandal trees were cut by subordinates on their rounds. In Governor-shola and Arambi, cutting back damaged seedlings was done in two compartments by the beat guards.

Palghat.—Climbers were cleared out on an area of about 200 acres in Coupe III, Silent Valley, at a cost of about eight annas per acre.

(v) *General—Underplanting, improvement fellings, etc.*

25. *Nilambur.*—In failed areas of the second rotation there were various measures aimed at improvement: planting of cuttings of *Vitex negundo*, sowing of bamboo, and sowing Boga (*Tephrosia candida*) in cleaned strips, 2 feet wide and spaced 4 feet apart. The latter work has been successful. Elsewhere in the older plantations with the aim of suppressing coarse grasses, and in order to provide material for a good burn, there was planting out of *Vitex* cuttings, *Macaranga* plants, and broadcast sowing of bamboo. The expenditure incurred was petty.

Natural regeneration of all tree species was freed from weeds and climbers over 145 acres in Walluvasseri and Karimpoya at a cost of about eight annas per acre.

Wynaad.—*Artocarpus hirsuta* and *Xylia* that had been underplanted into the 1901 and 1902 plantations at Begur were tended.

Climber-cutting was done over 1,262 acres of Coupes I and IV of the Improvement Felling Working Circle of Sultan's Battery range, and in selection and subsidiary coupes of Begur range.

In 625 acres of natural forest in Sultan's Battery Range Coupe II, Improvement Working Circle, selection and improvement fellings were carried out.

The Nilgiris.—Selection and improvement fellings were done over 1,107 acres in Compartment 27 of Mudumalai. Benne teak plantation was thinned and 532 poles were extracted.

CHAPTER IV.—EXPLOITATION.

26. Timber in the sale depots at Beypore, Nanjangod and Kasaragod were transferred to the control of the District Forest Officers during the year.

The Forest Utilization Officer continues to be in charge of sawn materials. Overseas trade was continued and a quantity of 3,740 cubic feet was sent from the Wynaad division. This was composed

of 203 cubic feet of rosewood and 3,537 cubic feet of laurel. The average net realization was Rs. 2-7-10 per cubic foot. The highest rates were Rs. 4-5-11 for laurel and Rs. 6-5-11 for rosewood.

From Nilambur, 778 cubic feet of laurel (*Terminalia tomentosa*) and 135 cubic feet of pillamarudu (*Terminalia paniculata*) were despatched to Europe. Expenditure was Rs. 2,196 and receipts so far amounted to Rs. 1,877.

Sleeper supply was continued. The operation was spread over all divisions, except the Nilgiris. The total supply from the Circle was 20,312 broad gauge and 41,132 metre gauge sleepers compared with 23,611 broad gauge and 6,160 metre gauge sleepers in the previous year. There has thus been a considerable increase in metre gauge sleepers. Ordinarily, no teak sleepers are supplied, but some seventh and eighth class poles were converted into sleepers in Nilambur.

The Railways have now declined to accept any second-class sleepers.

27. The attached statement shows details of supplies. The percentage of rejections shows improvement in regard to Hopea and a slight increase in Xylia. This was due to strictness in passing. The final passing is done by officers of the department:—

Name of division.	Size of sleepers.	Hopea.		Xylia.		Mesua.		Teak.		Total.		Percentage of rejections.
		Number presented.	Number passed.	Number presented.	Number passed.	Number presented.	Number passed.	Number presented.	Number passed.	Number presented.	Number passed.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Mangalore, North ..	B.G.	1,223	1,143	329	250	..	..	..	..	1,552	1,393	10·2
	M.G.	5,369	5,047	358	260	..	..	..	..	5,727	5,307	7·3
Mangalore, South ..	B.G.	2,221	2,069	79	69	..	..	..	..	2,300	2,138	7
	M.G.	470	440	4,975	4,335	..	..	..	..	5,445	4,775	12·3
Wynaad	B.G.	..	..	..	..	2,097	1,998	..	..	2,097	1,998	4·7
	M.G.	..	..	..	..	2,863	2,756	..	..	2,863	2,756	3·7
Nilambur	B.G.	76	76	3,902	3,422	309	299	12	12	4,299	3,809	11·4
	M.G.	19	19	13,143	11,995	97	93	762	735	14,021	12,842	8·4
Palghat	B.G.	..	..	298	276	12,080	11,407	..	..	12,378	11,683	5·6
	M.G.	..	..	1,416	1,287	17,121	16,690	..	..	18,537	17,977	3
Total ..	B.G.	3,520	3,288	4,608	4,017	14,486	13,704	12	12	22,626	21,021	7·1
	M.G.	5,858	5,506	19,892	1,7877	20,081	19,539	762	735	46,593	43,657	6·3

NOTE.—(i) South Mangalore and Palghat figures include some sleepers extracted in 1930-31 but disposed of as part of 1931-32 supply as below—Palghat—709 broad gauges and 2,127 metre gauges. South Mangalore—398 metre gauges.

(ii) The Forest Utilization Officer made also a private contract arrangement for the supply of 3,428 broad gauges and 2,170 metre gauges at Kallai. These have not been included in the statement.

(iii) The percentage of rejections for the various species was as under :—

	B.G.	M.G.
Hopea	6·6	6
Xylia	12·8	10·1
Mesua	5·4	2·7
Teak	..	3·5

28. As stated in the last year's report, it is not practicable to present in a few simple figures the financial aspects of the sleeper operations. But for sleeper operations extraction of timber would not have been possible at all in some cases. Mesua timber for example cannot be extracted in the log and sold in Kannoth range of the Wynaad division and in the Silent valley, Palghat division.

The following details are furnished :—

North Mangalore.—Sleepers extracted are supplied at Mangalore.

		C. FT.
Logs converted	...	25,449
Yield of passed sleepers—		
Broad gauge	...No.	1,393
Metre gauge	... ,,	5,307
Other sawn materials	...	2,377

Charges—	RS.
Felling, sawing, dragging and transport to sale depots ..	18,785
Charges for passing by the Forest Utilization Officer, say 4 annas per broad gauge and 2 annas per metre gauge sleeper.	1,013
Total ...	19,798

	RS.
Revenue realized (or expected)—	
Sleepers (including rejections)	27,644
Other sawn materials ...	4,648
Total ...	32,292

+ Rs. 16,404. This means that an average profit of 8 annas per cubic foot of *timber used*, was realized. This includes all wastage in sawing.

South Mangalore.—Sleepers were supplied at two centres, Kasaragod and Mangalore—

	C. FT.		
Logs sawn ...	41,481		
Sawn yield of passed materials—			
Broad gauge ...	...No. 2,138		
Metre gauge ...	... „ 4,775		
Scantlings ...	... „ 5,871		
Expenditure—	RS.		RS.
Expenditure on felling, dragging and transport	25,543	Revenue from sleepers and scantlings ...	39,709
Charges for passing by the Forest Utilization Officer at 4 annas per broad gauge and 2 annas per metre gauge for sleepers supplied at Mangalore ...	244	Net+Rs. 9,813, or 4 annas per cubic foot of log. There is a fall as compared with last year. The District Forest Officer has not commented on this.	
Forest Utilization Officer's charges for sleepers handed at Kasaragod ...	2,641		
Forest Utilization Officer's charges for scantlings, 5,872 cubic feet, say at 4 annas per cubic foot	1,468		
	29,896		

Wynaad.—The District Forest Officer, Wynaad, has not sent a statement of financial results. Sleepers are put on rail at Tellicherry. The work followed the same lines as in 1929. The following details are furnished :—

	RS.		RS.
Sleepers presented—		Revenue on passed sleepers—	
Broad gauge ...	No. 2,097		
Metre gauge ...	„ 2,863	1,998 at Rs. 8 4 0 ...	16,433
Production cost—		2,756 at Rs. 3 0 0 ...	8,268
At Rs. 6-4-0 per broad gauge and at Rs. 2-15-0 per metre gauge.	13,106	Total ...	24,701
	8,410	Net + Rs. 3,185.	
Total ...	21,516		

The felling for sleepers took place in Kannoth range, evergreen forests, and were solely in connexion with sleeper operations Extraction in log form has not yet been found to pay.

Nilambur.—Sleepers are supplied on rail at Nilambur. The details furnished in the report show the following:—

	Cost of production per cubic foot.	Sale rate per cubic foot.	Profit.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Nilambur range ...	1 8 10	2 3 7	0 11 3
Amarampalam range ...	1 9 11	2 3 7	0 9 8

The information furnished does not enable the profit per cubic foot of timber in the log to be calculated.

Palghat.—Sleepers were supplied at two centres, viz., Melattur and Olavakkot.

	C.FT.	
Silent valley—		
Logs converted ...	90,100	
Yield—		
Broad gauge No. ...	9,667	
Metre gauge „ ...	10,822	Revenue on passed sleepers 9,095 broad gauge + 12 second class and 9,918 metre gauge + 12 second class = Rs. 1,04,509.
	Rs.	
Expenditure on works ...	66,580	
Charges for Forest Utilization Officer's passing at 4 annas per broad gauge and 2 annas per metre gauge ...	3,770	Surplus Rs. 34,159 or 6 annas per cubic foot of log.
Total ...	70,350	

	C.FT.		
Kalladikode—			
Logs converted—			
Mesua	37,059		
Xylia	8,194		
Poon and Pali (*Dichopsis elliptica* logs)	48,568	Revenue on—	Rs.
Miscellaneous logs ...	11,347	Sleepers	45,811
Yield—		Kolmarams, vittams, etc....	27,288
Broad gauge No. ...	2,711	Total ...	73,099
Metre gauge „ ...	8,719		
Kolmarams	9,270	Net + Rs. 25,417 or 4½ annas per cubic foot of log.	
Vittams	8,620	No extraction in the log is practicable in the case of Mesua.	
	Rs.		
Expenditure on works ...	45,914		
Passing charges	1,768		
Total ...	47,682		

(a) SYSTEM OF MANAGEMENT.

(i) *Major Forest Produce.*

29. The subjoined statement shows the areas exploited during the year under different sylvicultural systems :—

	Area in acres.	
	For timber.	For fuel.
Clear-felling	535	5
Selection fellings (including subsidiary fellings)	5,594	...
Xylia sleeper fellings in Nilambur ...	570	...
Miscellaneous fellings (i.e., removal of dead and top broken trees in Nilambur division)	260	...
Improvement fellings	1,526	...
Coppice with standards	...	4
Simple coppice	...	1,262
Total ...	8,485	1,271

Bamboo fellings.—17,935 acres.

Sandal fellings.—Selection fellings of sandal took place in the unreserves and kumaki lands of South Kanara. In the Nilgiris, there were regulated fellings for sandal, and also unrestricted fellings on areas affected by spike disease.

Timber.—Details of areas worked for timber are as shown below :—

South Mangalore—Clear-fellings.—Ten acres in Sampaje reserve were clear-felled, the yield being 336 cubic feet per acre.

Wynaad.—Eighty acres in Coupe III, Begur and 75 acres in Coupe III, Chedleth. (The yield has not been specified.)

Nilambur.—One hundred and ninety-four acres of natural forests in Amarampalam range were clear-felled, the outturn being 122,945 cubic feet or 634 cubic feet per acre. Seventy acres of natural forests in Nilambur range were clear-felled the yield being 20,543 cubic feet or 293 cubic feet per acre. Twenty-one acres of teak plantations in Amarampalam range were finally felled, the yield being 10,619 cubic feet, or 506 cubic feet per acre. Forty-five acres of plantation were felled in Nilambur range, the yield being 57,663 cubic feet or 1,281 cubic feet per acre.

The Nilgiris.—Forty acres of natural forest in Mudumalai range were clear-felled, the yield being 13,773 cubic feet or 344 cubic feet per acre.

The following shows details of areas dealt with under selection and improvements fellings:—

Selection fellings (including subsidiary fellings).

	ACRES.
North Mangalore	409
South Mangalore	310
Wynaad (Begur and Chedleth ranges)	905
Kannoth range—Sleeper felling in Peria reserve, about	700
Nilambur	570
Palghat sleeper fellings	2,700
Total ...	5,594

Improvement fellings.

The Nilgiris (Mudumalai range)	1,106
Wynaad (Sultan's Battery range)	420
Total ...	1,526

Thinnings.—In Nilambur, thinnings were carried out over 689 acres of teak plantations, the yield being 119,635 cubic feet.

In the Nilgiris, Block I, Compartment I, Arambi, 4 acres (*Eucalyptus eugenioides*) was thinned the yield being 2,400 cubic feet.

Fuel.—Fuel coupes were worked in all divisions except Wynaad and Nilambur. The area dealt with was 590 acres in North Mangalore, 42 acres in South Mangalore, 46 acres in the Nilgiris, and 584 acres in Palghat.

In the Nilgiris, Muthinad Compartment 2 was worked under the system of coppice with standards. Five acres of compartment 6, Brooklands containing Acacia were clear-felled, the yield being 34,080 cubic feet or 6,816 cubic feet per acre. The rest of the fuel coupes in the Circle were worked under " simple coppice."

Sandalwood.—The outturn was $6\frac{3}{4}$ tons in North Mangalore, $3\frac{3}{4}$ tons in South Mangalore and 22 tons in the Nilgiris.

(ii) *Minor forest produce.*

30. *Minor forest produce.*—This was leased, as usual, to contractors everywhere except in the Mudumalai range of the Nilgiris. Hopea bark was extracted departmentally in North and

South Mangalore and supplied to Messrs. Gordon, Woodroffe & Co. for tanning purposes. There was no sale of catechu trees in North Mangalore this year.

Bamboos.—Bamboos are collected departmentally for floating purposes in Nilambur. Also 6,075 bamboos were extracted departmentally in Bolampatti range to provide work for the Irulars. Bamboo coupes were leased in South Mangalore, Palghat and the Nilgiris. There were no leases in North Mangalore and Wynaad.

Fodder grass.—The Military Department harvested grass in Walayar reserve, the quantity collected being 46½ tons.

Grazing.—This was regulated as usual by issue of permits. The revenue realized was Rs. 29,300.

(*b*) Agency of Exploitation.

31. Departmental extraction was confined generally to timber and sandalwood. Fuel in the Nilgiris, and minor forest produce in the Mudumalai range of the Nilgiris were collected departmentally. So also bamboos for departmental purposes in Nilambur.

As in the previous year, Mesua, Hopea and Xylia were converted into sleepers.

About 250,000 cubic feet of logs were converted into sleepers.

Nearly 49,000 cubic feet of Poon (*Calophyllum*) and Pali (*Dichopsis elliptica*) extracted from the Kalladikode valley (Palghat division) were converted into cart materials (kolmarams and chattams) and transported for sale. Vittams (rough squared timber) converted from *Artocarpus hirsuta, Dysoxylon*, jack, rosewood, and venteak (*Lagerstroemia*) were likewise transported for sale to Olavakkot, the quantity being about 11,000 cubic feet. The sale of logs is dealt with below. As stated at the commencement, all the log depots were under the control of the District Forest Officer at the end of the year.

North Mangalore.—Nearly 28,000 cubic feet of logs were sold during the year. The District Forest Officer has not offered any remarks on the market conditions.

South Mangalore.—There were two depots, one at Mangalore and the other at Kasaragod. Nearly 30,000 cubic feet of logs and 38,000 cubic feet of sawn timber (of which 34,000 cubic feet was by the Forest Utilization Officer) were sold during the year. The timber market was dull.

Wynaad.—The sales effected by the Forest Utilization Officer were 12,500 cubic feet of logs and 19,000 cubic feet of scantlings. The District Forest Officer has not furnished information in regard to his own sales.

Nilambur.—The sale of logs in Beypore depot amounted to over 300,000 cubic feet. The sale of sawn materials amounted to 11,000 cubic feet.

The Nilgiris.—The sale during the year amounted to about 15,000 cubic feet. A small stock was disposed of at Nanjangod this year also.

Sandalwood.—The following shows the sales :—

	TONS.	QRS.	RS.	
North Mangalore	6	65	9,196	at Rs. 1,000 per ton for wood and Rs. 400 for chips.
South Mangalore	3	64		
Total ...	10	49		
The Nilgiris—				
Masinigudi	20	76	12,195	at Rs. 750 per ton for wood and Rs. 166 per ton for chips.
Coonoor wood sold at Satyamangalam, including previous year's stack ...	2	47	1,670	at Rs. 790 per ton on the average.
	23	43	13,865	
Total ...	34	12	23,061	Total.

Fuel.—As in the previous year, fuel was cut and sold to contractors in bulk in the Nilgiris. There was no retail sale.

Minor forest produce.—In addition to the usual collection in the Nilgiris, 40 tons of Hopea bark was collected in North and South Mangalore and supplied to Messrs. Gordon, Woodroffe & Co.; but the transaction was unremunerative and the firm had the contract terminated. Ivory collected was disposed of through the District Forest Officer, South Coimbatore. Revenue realized for ivory for South Mangalore division was Rs. 311 and for Wynaad Rs. 25.

(ii) *By purchasers.*

Major produce.

32. *Timber.*—This was generally confined to the removal of a few dead trees and windfalls.

In Nilambur, as in the previous year, in the Nellikutha clear-felling area, 194 acres, the right of working inferior junglewoods and rejections was sold. Twenty-eight thousand three hundred and one cubic feet valued at Rs. 2,368 was removed. The right to make spokes and felloes out of rejected teak top ends of the final felled area in Nilambur range was sold—the quantity removed was 560 cubic feet valued at Rs. 340.

Fuel.—Fuel coupes were sold standing in North and South Mangalore, in Palghat and in Coonoor range (Nilgiris). The depression in tile trade continued in Mangalore, affecting the sale of fuel coupes.

The Badagas on the Nilgiris continue to remove dry fuel on permits at Re. 1 per house.

Bamboo coupes were leased out in South Mangalore, Palghat and the Nilgiris.

Minor forest produce.

33. *Minor forest produce.*—This was leased out to contractors. The Dhupa (*Vateria Indica* fruit) lease in all divisions except Nilambur and the Nilgiris continued to be in force; but suffered like everything else from the depression in trade.

(iii) & (iv) *By right-holders and free-grantees.*

34. The subjoined statement shows the produce removed by free-grantees and right-holders :—

	Timber in thousands of cubic feet.	Value.	Fuel in thousands of cubic feet.	Value.	Bamboos. Value.	Grazing Value.	Other minor forest produce. Value.	Total Value.
		Rs.		Rs.		Rs.	Rs.	Rs.
Free-grantees	2	610	..	..	118	182	21	931
Right-holders	16	7,355	14	516	..	399	..	8,270
Total	18	7,965	14	516	118	581	21	9,201

Outturn and sources of forest produce.

	Timber in thousands of cubic feet.		Fuel in thousands of cubic feet.		Bamboos. Value.		Grazing and minor forest produce Value.	
	1929-30.	1930-31.	1929-30.	1930-31.	1929-30.	1930-31.	1929-30.	1930-31.
					Rs.	Rs.	Rs.	Rs.
Government agency.	1,257 * 217	1,211	565 * 110	677	10,748	11,215	4,914	5,083
Purchasers ..	230	139	1,675	1,939	16,554	18,216	73,658	60,904
Free-grantees ..	3	2	..	..	16	118	1,077	602
Right-holders ..	17	16	6	14	..	..	..	..
Total ..	1,507 * 217	1,368	2,246 * 110	2,630	27,318	29,549	79,649	66,589

* Chenat Nair figures.

Timber.

35. The output of the year shows a fall of 46,000 cubic feet as compared with last year (exclusive of Chenat Nair figures). Important variations were a decrease of 118,000 cubic feet in South Mangalore due to closure of Parappa mill and curtailment of fellings owing to large stock on hand: a decrease of 100,000 cubic feet in Nilambur, due to postponement of subsidiary fellings: an increase of 114,000 cubic feet in Palghat due to expansion of operations in Silent valley and the addition of Kalladikode operations: increase of output of 30,000 cubic feet in Wynaad and of 26,000 cubic feet in the Nilgiris, due to the yield being higher than the areas allotted were expected to give.

Purchasers—Timber (—91,000 cubic feet)—

Reserves	...	...	...	— 76,000 cubic feet.
Unreserves	...	...	...	— 15,000 ,,

Reserves.—Of the decrease of 76,000 cubic feet, 72,000 cubic feet pertains to Palghat; and is attributed to the low yield in Coupe V, Pole Working Circle and also in other fuel coupes. Wynaad also shows a fall of 12,000 cubic feet and this is attributed to restricted sale of dead trees from reserves. Against this, there is an increase of 10,000 cubic feet in North Mangalore for which no adequate explanation has been furnished.

Unreserves.—The decrease occurred in North and South Mangalore. This relates to assignments of land on darkhast.

Fuel.

36. *Government agency.*—Leaving out of consideration the Chenat Nair figure, since operations there have stopped, there is an increased output of 112,000 cubic feet. There is an increase of 174,000 cubic feet in the Nilgiris attributed to larger yield in the area worked under the revised working plan. There was however a reduction of 40,000 cubic feet in Nilambur due to there being no departmental fuel operations; and a decrease of 22,000 cubic feet in North and South Mangalore due to the fact that fellings in indicator areas were not found necessary.

Purchasers (+ 264,000 cubic feet)—

Reserves	...	...	...	+ 261,000 cubic feet.
Unreserves	...	...	...	+ 3,000 ,,

Reserves.—There was a large increase in North Mangalore (453,000 cubic feet) attributed to greater yield in the coupes worked. Against this, there was a decrease in output of 90,000 cubic feet in South Mangalore and a like quantity in Palghat, attributed to a coupe not being worked in the former, and to low yield in the latter.

Unreserves.—There is no significant variation. There is an increase in Palghat and the Nilgiris and a decrease in North and South Mangalore.

Bamboos.

37. *Extracted by Government agency.*—Revenue increased by Rs. 467. The increase was connected with bamboos extracted with a view to provide work for Irulars in Bolampatti range, Palghat division.

Purchasers.—Revenue increased by Rs. 1,662. A better price was realized for Singapathi bamboo coupe in the Palghat division.

Grazing.—The number of cattle admitted to graze on payment was 123,494 against 121,004 in the previous year. The variation is insignificant.

Minor forest produce (including grazing value).

38. *Government agency.*—Revenue increased by Rs. 169.

Purchasers.—Revenue decreased by Rs. 12,754. This was chiefly in North and South Mangalore divisions and was due to poor prices realized for minor forest produce farms. A similar fall occurred in Palghat and Wynaad divisions. There was a slight fall in grazing revenue due to cattle mortality.

Free-grantees.—The decrease in the value of produce removed by free grantees is due to the fact that free removal of metal, etc., by the Public Works Department was not allowed during the year.

CHAPTER V.—FINANCIAL RESULTS.

39. The following statement shows the revenue and expenditure of the year together with comparative figures of the previous year:

Revenue.			Expenditure.		
1929-30.	——	1930-31.	1929-30.	——	1930-31.
Rs.		Rs.	Rs.		Rs.
	As in Form No. 39 ..	11,06,020		As per Form No. 39—	
	Credited in Fifth Circle and pertaining to Nilgiri sandalwood sales.	1,670	6,30,102	8-*b*. Conservancy. Maintenance and Regeneration.	6,22,411
			4,59,246	*c*. Establishment ..	4,77,054
	Minor Forest Produce ..	350	1,17,185	Capital outlay ..	—12,246
	Ivory	336			
	Chenat Nair figure (furnished by the Forest Engineer).	13,200		Net ..	10,87,224
			— 79,332	Chenat Nair (includes loss in disposal of assets) Rs. 38,428.	46,085
	Forest Engineering division (saw mills.)	2,301		Expenditure by the Forest Utilization Officer —	
	Beypore tope	2,693			
		11,26,570		Wynaad division ..	8,688
	Refunds	3,161		South Mangalore division.	6,116
				Nilambur division ..	2,272
				Expenditure incurred by the Forest Engineer pertaining to Nilambur (provisionally adopted).	19,448
12,63,326	Total ..	11,23,409	12,85,865		11,69,783

Deficit.—Rs. 46,374 against deficit of Rs. 22,539 in the previous year.

The revenue from sales transacted by the Forest Utilization Officer is given below :—

	Rs.	
Nilambur (Beypore depot.)	2,04,894	Before 1st December 1930.
	1,48,881	After 1st December 1930 when the depot was transferred to the control of Forest Utilization Officer.
	3,53,775	
Wynaad division (Mysore and Nanjangod).	96,219	Before 1st December 1930.
	46,560 68,192	After 1st December 1930.
	2,10,971	
Kasaragod depot ...	52,133	(excluding sleepers).

There were practically no sale transactions in Olavakkot depot.

Total sales amounted to Rs. 6,16,899. The Forest Utilization Officer's overheads on sales (exclusive of depot expenses) were 2·36 per cent on the turnover (as given in the audit report for 1930–31).

The financial position of the divisions is dealt with below. As observed in the previous report, the Nilambur figures convey a misleading impression. On account of commercial accounts there, only the net results of exploitation activities emerge. Also adjustments refer partly to transactions of the current year and partly to those of the previous year.

Division.	Revenue.	Expenditure.	Net.
	Rs.	Rs.	Rs.
Mangalore North	86,833	1,00,807	— 13,974
Mangalore South	2,81,421 + 1,144 + 311	1,36,559 + 6,116	+ 39,890
Wynaad	3,71,287 + 25	3,93,251 + 8,688	— 30,702
Nilambur	1,23,621 + 2,693	40,179 21,720	+ 64,415
The Nilgiris	97,381 + 2,020	1,35,186	— 35,785
Palghat	2,39,979	2,20,380	+ 19,599
Chenat Nair	13,200	46,035	— 32,835
Forest Engineer	2,301	..	+ 2,301
Direction	2,387 — 1,144	60,862	-- 59,619*
Total ..	11,23,409	11,69,783	— 46,374

* Expenditure under Direction includes pay and travelling allowance of Mr. Rangaswami, Extra Assistant Conservator attached to Nilambur. Also, leave allowances adjusted to the extent of Rs. 4,497.

Pay and travelling allowance of the Inspector of Livestock and his establishment is apportioned thus:—

	Rs.
North Mangalore	382
South Mangalore	656
Wynaad	2,078
Nilambur	1,504
Palghat	218
The Nilgiris	657
Fifth Circle	1,914
Second Circle	137
First Circle	164
	7,709

The financial position of each division is discussed below.

North Mangalore—(– *Rs.* 13,974).—This is due to the fact that nearly 27,000 cubic feet of timber remained unsold, that catechu coupes in Coondapoor range did not find a sale and that there was a fall of about Rs. 3,000 in realizations from unreserved lands.

South Mangalore (+*Rs.* 39,974).—This is an improvement on the results of past two years during which the division showed a deficit. In previous years, the mill running expenses contributed to the deficit: but this has been stopped. There was an increase in sales of timber in the log during the year. (The value of timber in Kasaragod depot at the commencement of the year was Rupees 1,05,400; but at the close of the year it was only Rs. 39,100.)

The average costs of production and the average selling rates are furnished below:—

—	Average cost of production per cubic foot.	Average felling rate per cubic foot.	Quantity sold	Net result per cubic foot.
	RS. A. P.	RS. A. P.	C.FT.	RS. A. P.
Kasaragod depot—				
Logs	0 11 3	0 12 3	5,114	+ 0 1 0
By sale of sawn materials supplied by the division including sleepers.	1 7 11	1 4 8	5,879	— 0 3 3
By sale of sawn meterials supplied by the Parappa sawmill.	1 13 4	1 0 0	27,676	— 0 7 4
Mangalore depot—				
Logs (*b*)	0 11 2	0 14 7	15,917	+ 0 3 5
Sawn materials and scantlings, excluding sleepers (*c*).	1 8 9	1 9 3	4,097	+ 0 0 6
Kasaragod log depot—				
Logs (*a*)	0 8 6	1 3 11	8,820	+ 0 11 5 The quantity sold was mostly teak.

	(*a*)	(*b*)	(*c*)
	RS. A. P.	RS. A. P.	RS. A. P.
Felling	0 0 6	0 0 6	0 0 10
Dragging	0 0 11	0 0 11	0 1 7
Rafting or carting	0 4 8	0 7 9 (carting)	0 10 10
Hauling logs	0 0 5	..	0 7 6 (sawing).
District overheads	0 2 0	0 2 0	0 4 0
	0 8 6	0 11 2	1 8 9

Wynaad division (– *Rs.* 30,702).—There is no great change as compared with last year, when the deficit was Rs. 22,372. The audit report for 1930–31 has not yet come to hand. The audit

report of the Forest Utilization Officer's division for 1930–31 gives the following figures :—

Nanjangud depot—

Logs sold...	12,516 cubic feet (average rate realized being Rs. 3-3-5 per cubic foot).
Sawn materials	18,679 cubic feet (average rate realized being Rs. 2-8-7 per cubic foot).

The Forest Utilization Officer's expenses and overheads amounted to As. 6–2 per cubic foot for logs and As. 5–6·1 for scantlings.

There was a fall in the quantity of teak logs sold, viz., 11,775 cubic feet against 42,423 cubic feet in the previous year. Demand was poor.

Sales through the Forest Utilization Officer in Mysore depot amounted to Rs. 68,192.

The closing stock in the two depots amounted to 264,000 cubic feet, the stock in the two depots being nearly equal.

Nilambur division.—According to commercial accounting the financial result, so far as adjustments were actually effected during the year, is a profit of Rs. 64,415. As will be seen below, the position, presented according to ordinary accounts shows a profit of slightly over two lakhs. The audit report has not yet come to hand in the Direction office. The information furnished by the District Forest Officer on the basis of audit report is furnished below.

The net profit for the year under review of the Exploitation unit of the division, which is a commercial concern, is Rs. 1,85,791 against Rs. 1,71,189 in 1929–30 The total revenue and expenditure of the division (commercial and non-commercial units) are given below :—

EXPLOITATION UNIT.

	Net surplus.
	RS.
Balance profit of 1929–30 adjusted in the accounts of 1930–31	1,21,119
Profit for the year 1930–31	1,85,791
Total ...	3,06,910

REGENERATION AND GENERAL FOREST ADMINISTRATION.

Revenue.

		Net surplus.
	RS.	RS.
1. Recovered by adjustments from the commercial concern	1,04,232	
2. Revenue realized by the district ...	4,449	
3. Revenue realized by the Forest Utilization Officer, pertaining to non-commercial units	4,492	
Total ...	1,13,173	

Expenditure.

1. District expenditure (including leave salary adjusted by the Accountant-General)	95,625	
2. Expenditure incurred by the Forest Engineer	37,310	
3. Expenditure incurred by the Forest Utilization Officer	2,272	
	1,35,207	
Net ...		— 22,034
Total ...		2,84,876

The different figures making up the net profits of the Exploitation unit for the two years 1929–30 and 1930–31 are compared below :—

	1929-30.	1930-31.
	RS.	RS.
Profit on forest trading	26,405	41,026
Do. hand-sawn sleeper trading ...	14,320	20,661
Do. log trading, Beypore	1,18,504	1,39,078
Do. overseas consignment trading ...	1,818	— 842
Do. sawn timber trading, Beypore	25,727	— 2,144
Do. sawn timber, Olavakkot ...	...	2,773
Interest received, etc.	818	2,219
Other receipts	2,368	2,775
Total ...	1,89,960	2,05,546
Deduct interest on capital and other miscellaneous charges	18,771	19,755
Net profit ...	1,71,189	1,85,791

The variations are explained below.

Forest trading—Increase.—The increase is mainly due to the larger quantity sold in the forest and to the higher average rate than in 1929–30, as shown below :—

	1929–30.		1930–31.	
	Quantity.	Rate.	Quantity.	Rate.
	C. FT.	RS. A. P.	C. FT.	RS. A. P.
Teak logs	1,138	1 0 1	20,875	1 1 10
Teak poles	62,271	0 8 10	67,405	0 7 1
Miscellaneous	34,104	0 4 3	31,902	0 5 5
Total ..	97,513	0 7 4	120,182	0 8 6

Hand-sawn sleeper trading—Increase.—Mainly due to the increase in the number of sleepers supplied to the railways as shown below :—

	1929–30	1930–31
	RS.	RS.
Broad gauge—		
First class	3,623	3,809
Second class	273	7
	3,896	3,816
Meter gauge—		
First class	1,038	12,845
Second class	70	43
	1,108	12,888

Log-trading—Beypore—Increase.—This is due to the larger quantity sold. Against 158,719 cubic feet sold in 1929–30, the sales in 1930–31 amounted to 310,450 cubic feet. The increase is, however, not proportionate to the quantity sold. This disproportion is partly due to the large quantity of species other than teak sold, and partly to the low rates realized for most of the classes of timber sold. These low rates were due to general trade depression, and to the attempt to dispose of most of the stock within the financial year, on the assumption, presumably, that trade would be even worse in the current year. The average rate per cubic foot obtained during the year was only Rs. 1–0–7 per cubic foot against Rs. 1–8–8 in 1929–30.

Sawn timber trading—Beypore.—The sawmill at Beypore worked only for two months during the year. The mill was closed with effect from June 1930 under the orders of Government.

Due to the depression in trade there was practically no market for the sawn materials and so the rates realized were poor. The quantity sold during the year was 11,475 cubic feet against 36,604 cubic feet in 1929–30.

The selling rates and the costs of production for the two years 1929–30 and 1930–31 are compared below :—

(a) For logs.

—	Cost of production at Beypore sale depot per cubic foot including overheads.		Sale rate per cubic foot at Beypore.		Quantities sold.	
	1929–30.	1930–31.	1929–30.	1930–31.	1929–30.	1930–31.
	(a) For logs.					
Nilambur Range.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	C.FT.	C.FT.
Teak	0 4 10·7	0 5 6·9	1 14 7	1 11 4	88,230	74,920
Miscellaneous species from natural forests ..	0 7 4·6	..	..	..	..	..
Amarampalam Range.						
Teak	0 9 6·3	0 8 10·4	1 1 10	0 12 11·5	20,134	80,693
Miscellaneous species from natural forests ..	0 10 4·0	0 8 11·3	1 1 0	0 13 3·1	50,355	154,837

Note.—The cost of production has been worked out separately for each range, but the timber when it reaches Beypore, is all sold together, and the rate realized for timber of each range is therefore not available. The teak logs came mainly from Nilambur, and the miscellaneous timber from Amarampalam range

(b) For sawn timber.

Hand-sawn sleepers—						
Nilambur range	1 3 3·9	1 8 10·3	2 6 11	2 3 7	13,837	31,260
Amarampalam range	1 7 5·6	1 9 11·3	2 6 11	2 3 7		
Beypore mill-sawn timber	2 4 4·1	2 4 5·8	3 1 8	3 3 1	(*a*) 26,066	(*a*) 2,113
			1 10 9	1 13 3	1,338	6,482
Do.	2 1 3·4	2 2 7·9	3 10 11	2 11 5	(*b*) 4,040	(*b*) 563
			2 10 10	1 9 8	39	381
Rejections and other sales	0 2 0·7	..	0 11 6	0 4 1	4,477	1,936

(*a*) Sales through agent; expenditure figures include his commission.
(*b*) Sales to public and work orders.

Details for the costs of production are furnished below:—

(*a*) *For logs.*

	Plantation teak.		Miscellaneous species natural forest.	
	1929-30.	1930-31.	1929-30.	1930-31.
Nilambur Range.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1. Felling, conversion, dragging, carting, etc., up to riverside depots.	0 1 2·4	0 1 1·2	0 2 4·7	0 2 1·4
2. Overheads and other miscellaneous charges.	0 1 8·4	0 1 7·4	0 1 8·4	0 1 7·4
3. Floating charges to Beypore ..	0 1 11·9	0 2 10·3	0 3 3·5	Miscellaneous species were not floated but sold locally.
Total cost of logs at Beypore per cubic foot.	0 4 10·7	0 5 6·9	0 7 4·6	
Amarampalam Range.				
1. Felling, conversion, dragging, carting, etc., up to riverside depots.	0 4 0·7	0 3 8·5	0 4 10·4	0 3 9·4
2. Overheads and other miscellaneous charges.	0 1 8·4	0 1 7·4	0 1 8·4	0 1 7·4
3. Floating charges to Beypore ..	0 3 9·2	0 3 6·5	0 3 9·2	0 3 6·5
Total cost of logs at Beypore per cubic foot.	0 9 6·3	0 8 10·4	0 10 4·0	0 8 11·3

The variations in the rates are briefly explained below:—

Item 1.—*Felling, conversion, dragging, etc.—Nilambur range.*—The reduction is partly due to reduced rates paid for felling and carting and partly to the lower cost of maintenance of livestock employed on dragging owing to the lower rates paid for provisions, which more than counteracted the adverse factor of being unable to work the livestock full time owing to restriction of felling.

Amarampalam range—Plantation teak.—The cost of felling and dragging was only As. 1-8·8 per cubic foot against As. 2-7·1 per cubic foot in 1929-30, due to reduction of cost of felling and maintenance of livestock and in spite of restricted exploitation as stated above. But in the case of carting, on account of longer leads, a higher rate had to be paid (As. 1-10·7 per cubic foot against As. 1-5·6 in 1929-30).

Miscellaneous species.—The decrease is mainly due to the reduction of cost of working the tractor; the cost of carting was also less due to shorter lead.

Item 2.—*Overheads.*—The details of overhead charges are given below:—

	1929-30.		1930-31.	
	Amount.	Rate per cubic foot.	Amount.	Rate per cubic foot.
	Rs. A. P.	A. P.	Rs. A. P	A. P.
Share of range and district establishment.	28,673 4 6	0 9·96	15,646 6 9	0 7·186
Overseas and passage pay	2,940 5 2	0 1·02	1,352 0 0	0 0·621
Leave and pension contribution.. ..	5,596 5 9	0 1·94	3,117 3 0	0 1·433
Direction charges..	3,000 0 0	0 1·04	3,000 0 0	0 1·378
Share of Inspector of Livestock ..	2,123 0 0	0 0·74	1,504 0 0	0 0·690
Interest on Exploitation Capital ..	6,639 0 0	0 2·31	8,160 0 0	0 3·743
Audit fee	1,500 0 0	0 0·52	1,500 0 0	0 0·689
Preliminary expenses written off (working plan).	855 12 6	0 0·30	1,711 8 11	0 0·786
Repairs to roads	1,538 0 3	0 0·53	976 0 11	0 0·448
Rent of buildings and furniture ..	2,048 2 5	0 0·71	2,241 6 0	0 1·029
Postage	360 8 0	0 0·13	428 5 6	0 0·196
Tools and miscellaneous articles written off.	2,526 10 3	0 0·88	1,426 9 0	0 0·655
Cost of stationery and printed forms ..	396 13 0	0 0·14	568 13 4	0 0·261
Miscellaneous and contingent expenditure.	577 11 5	0 0·20	546 12 2	0 0·251
Total ..	58,775 9 7	1 8·4	42,169 1 1	1 7·4

The proportion of the district overheads debited to the Exploitation unit was reduced from 50 per cent to 25 per cent in accordance with G.O. Mis. No. 1536, Development, dated 12th August 1930, which accounts for the decrease.

As the quantity of timber felled during the year was less (only 418,016 cubic feet felled in 1930–31 against 552,469 cubic feet in 1929–30) the reduction is not more appreciable.

Item 3.—*Floating charges to Beypore—Nilambur range.*—The actual rates were higher than in 1929–30. The increase is due to the fact that the localities from which floating took place were considerably less accessible and the floating streams more difficult than in 1929–30. Further, in the year under report, Government elephants were not used to drag logs to the top of the bank, for delivery to the contractor, as was the case in former years, so he had to be paid extra for using his own elephants. Actually, the increase is not in proportion to the increased difficulty of work, and it is considered that Government got better value for the rates paid in 1930–31 than in the previous year when rates were lower and conditions much easier.

Amarampalam range.—The total quantity floated during the year from this range was 226,041 cubic feet (which is a record figure) against 155,485 cubic feet in 1929–30. 120,928 cubic feet

were floated with boats, and the balance in bamboo rafts. The rates for floating by boats were considerably reduced (from Rs. 3–10–0 per candy and the lowest rate paid in 1929–30 to Rs. 3–6–0 and Rs. 3–2–0 per candy from Nellicutha and Nedungayam respectively). This is the main reason for the decrease in the average rate, though the reduced cost of feed of livestock was a contributory factor.

(b) For sawn timber.

Hand-sawn Sleepers.

	Nilambur range.		Amarampalam range.	
	1929–30.	1930–31.	1929–30.	1930–31.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1. Cost of timber to yield 1 cubic foot of sleeper.	0 9 0·8	0 9 8	0 12 2·6	0 8 7·7
2. Share of elephants engaged	0 1 0 4	0 1 11 8	0 0 8·4	0 1 9·6
3. Sawing and transport charges ..	0 6 5·1	0 11 9·8	0 7 9·0	0 13 11·6
4. Contingent and miscellaneous expenses.	0 1 4·7	0 0 6·6	0 1 4·7	0 0 8·3
5. Forest Utilization Officer's overheads.	0 1 4·9	0 0 10·1	0 1 4·9	0 0 10·1
Total ..	1 3 3·9	1 8 10·3	1 7 5·6	1 9 11·3

The increase in costs was mainly due to the increased rates for sawing and carting on account of the remoteness of the localities from which sleepers were worked. The increase in share of elephants is due to the scattered disposition of logs suitable for sawing, which necessitated longer dragging to the sawing centres. (Logs cannot be hoisted singly, in the flat country in which most of the sleeper operations were conducted, without paying extremely high rates for digging saw-pits.)

Beypore Saw Mill.

	1929–30	1930–31
	C.FT.	C.FT.
Quantity of logs converted ...	85,865	4,861
Yield	48,677	3,283
Percentage of outturn	56·7	67·5

	1929-30.			1930-31.		
	RS.	A.	P.	RS.	A.	P.
Cost of timber to yield 1 cubic foot of sawn material.	1	0	3·6	0	13	9
Cost of sawing per cubic foot... ...	0	11	9·6	1	1	11·8
Expenses in connection with sale—						
Binding and transport	0	1	8·7	0	1	2·4
Share of depot expenses	0	1	7·8	0	0	10·7
Share of overheads	0	1	9·7	0	0	10
Total cost per cubic foot for sales other than to agent.	2	1	3·4	2	2	7·9
Add commission paid on sales to agent.	0	3	0·7	0	1	9·9
Total cost per cubic foot for sales to agent.	2	4	4·1	2	4	5·8

The saw mill at Beypore worked only for two months during the year as Government ordered the mill to be closed.

The profit for the year has not been adjusted at all. As there was sufficient working capital, the advance of Rs. 70,000 made by Government to the concern has been refunded to Government.

The figures of gross revenue and expenditure pertaining to the division as analysed by the District Forest Officer in ordinary accounts form are as follows :—

	Revenue.	Expenditure.
	RS.	RS.
Exploitation	5,03,953	1,67,692
Other credits and debits that cannot be classified	3,386	1,35,274
	5,07,339	3,02,968

The Nilgiris (– *Rs.* 35,785).—This division works usually with a deficit; but it showed a surplus last year. This year it has again shown a deficit. There has been a fall of about Rs. 25,000 in timber revenue, Rs. 14,000 under sandalwood, Rs. 10,000 under firewood and charcoal, and Rs. 18,000 under Revenue department timber; and simply poor demand accounts for the deficit.

Palghat (+*Rs.* 19,599).—Position is about the same as in the last year. There has been an increase in revenue as well as of expenditure. The increase of expenditure was due to inclusion of the sleeper operation in the Kalladikode Valley, an operation which belonged hitherto to the Exploitation division.

Chenat Nair and *Direction* figures do not call for remarks.

The important variations between 1929–30 and 1930–31 are explained below. Last year, the revenue realized by the Forest Utilization Officer was credited in his accounts, but this year it has been transferred to divisions concerned.

Revenue.

40. *VIII (a) Timber and other produce removed by Government Agency—Sandalwood* (— *Rs.* 17,025).—This was due to fall in price.

Timber (+*Rs.* 47,862).—There was an increase of Rs. 47,000 in Palghat and of Rs. 27,000 in Wynaad and a decrease of Rupees 26,000 in the Nilgiris. The increase in Palghat was due to the inclusion in the divisional accounts of the Kalladikode sleeper supply; and was due also to the adjustment of Rs. 24,000—sleeper revenue—pertaining to the 1930–31 supply, within the year itself. The increase in Wynaad was due to sales of larger quantities; more timber having been put on the market. The decrease in the Nilgiris was due to decreased demand for the type of timber that this division produces.

Firewood and charcoal (—*Rs.* 11,548).—Due to poor sales in the Nilgiris.

Timber and other produce removed by consumers—Forest Department—Other minor forest produce (— *Rs.* 8,433) *exclusive of revenue from Beypore coconut tope*).—This deficit was spread over the North and South Mangalore and Wynaad divisions. There was a fall in price of minor forest produce and certain minor forest produce ' farms ' could not be sold.

Revenue Department—Timber (— *Rs.* 21,670).—This was mainly in the Nilgiris where in the previous year over Rs. 18,000 was realized in a single case of assignment.

Rent of buildings (— *Rs.* 5,306).—The decrease is mainly in Nilambur and is apparently due to the fact that no rental is now charged on regeneration areas, as regeneration expenditure is no longer capitalized.

Expenditure.

41. 8 (*b*) *Conservancy, Maintenance and Regeneration—Timber—(Government Agency)*.—The expenditure in division shows an increase of Rs. 1,25,142. The increase was mainly in Wynaad and Palghat divisions. This was on account of larger output in the former and of inclusion of Chenat Nair operations in the latter.

Regeneration (+*Rs.* 25,327).—The increase is due to the fact that regeneration expenditure in Nilambur is now to be treated as ' ordinary.' It was charged to capital outlay in the previous year.

8. *c. i. District Establishments.*—The expenditure in Nilambur which was treated as capital in the previous year is transferred to ordinary during the year. The expenditure inclusive of Nilambur shows an increase of Rs. 7,789 and is due to the fact that in Nilambur the proportion of district overheads debitable to regeneration and general forest administration has been changed from 50 to 75 per cent.

52. *A. Capital Outlay—Communications and Buildings* (—Rs. 11,901).—The decrease is spread over several divisions and is due to works being reduced on account of financial stringency.

Investments in Government commercial undertakings.—The expenditure in 1929–30 was Rs. 27,503; and in 1930–31 Rupees 72,195. The working capital of Rs. 70,000 was withdrawn during the year.

The expenditure on roads from Nedungayam to Karulai in 1930–31 was also less by about Rs. 9,000.

The outstandings at the close of the year amount to Rs. 2,88,811 of which Rs. 35,990 fell within the year.

Of the revenue realized, 87 per cent was from major produce, 7 per cent from minor produce and 6 per cent from other sources. Of the expenditure, 71 per cent relates to exploitation, 14 per cent to improvement and upkeep of forests and 15 per cent to miscellaneous items.

CHAPTER VI.—RESEARCH AND EXPERIMENTS.

42. As in previous years the principal sylvicultural research work was conducted by the Forest Research Officer.

Some minor experiments were carried out by the District Forest Officers with the following result:—

North Mangalore.—' Funnel ' sowings in Coupe V of Someshwar reserved forest were carried out during the year. The treatment need not be detailed as it followed the usual lines. The results lead the District Forest Officer to think that Someshwar semi-evergreen tracts do not suit teak. The latter tended to fork at a low height, and only 50 per cent of the plants survived their first hot weather. Xylia and rosewood were more satisfactory in the District Forest Officer's opinion. However, further time is needed before it can be said what has succeeded and what has failed.

Burning of deciduous forest which has a tendency to become evergreen.—Under instructions in an inspection note by Mr. A. Wimbush, the then Conservator of Forests, two 10-acre plots

were selected in Coupes IV and V of Doddinamane reserved forest and were demarcated by cut lines 10 feet wide. Both the plots are adjacent, and are typical areas containing Strobilanthes, evergreen shrubs and climbers with sparse regeneration of the more common deciduous species. The area in Coupe IV was set fire in January when all the debris of fallen trees were quite dry. Owing to the presence of Strobilanthes standing still green, the burning was not very successful.

Strobilanthes and other undergrowth of Plot 2 in Coupe V was clear-felled in February and was allowed to dry. When the cut stuff was quite dry in March, the area was set fire and a fierce fire was the result.

It is considered by the District Forest Officer that fire will prove efficacious in checking the growth of inferior evergreen species; and that the growth of venteak (*Lagerstræmia*), Terminalias and Xylia root suckers will be assisted. The need now is to achieve a cheap method.

Preparation of catechu balls and cakes departmentally.—In order to gain first-hand knowledge, cutch was prepared departmentally. Ten average-sized *Acacia Sundra* trees were felled and they produced 17 quarters and 21 lb. of cutch. Of this, 10 quarters and 14 lb. were in the shape of balls, and 7 quarters and 7 lb. in the shape of cakes.

The wood of the ten trees employed amounted to 90 cubic feet; and contained 40 cubic feet of heartwood, weighing 161 quarters and 19 lb. Cost of felling, billeting, carting the billets to the stills and preparing balls and cakes: Rs. 60.

Two hundred pounds of cutch half in the form of cake and half in balls was sent to the Imperial Institute, London, and to the Forest Research Institute, Dehra Dun, for valuation and advice as to marketing.

Samples of cutch were also sent to about 50 dealers in cutch all over India and Burma. The District Forest Officer has been receiving enquiries.

South Mangalore.—The experiment started in previous years of clear-felling all undergrowth except Hopea in Jalsur East reserved forest (artificial area) over about 10 acres was given up as it was found that the Hopea seedlings did not respond to this sort of treatment.

In accordance with suggestions by the Forest Research Officer, to the effect that the present stocking of rosewood (*Dalbergia latifolia*) could be improved by encouraging root-suckers, this has been done by cutting a trench 15 to 20 feet away from and around each tree before it was felled. The results will be apparent in 1931.

Wynaad.—A lantana area of 40 acres in Begur, set aside for experimental burning, was burnt for the fourth time since the experiment was started. Although it can be said that the yearly burning checks the growth of lantana, and makes it less vigorous, the burning had also affected the tree-growth adversely. As continued burning would end by divesting the area of tree-growth the experiment has been abandoned.

The 600 seedlings of Ceylon satinwood planted in half an acre near Muthanga referred to in the last report were left unweeded, to see if this species derives benefit from not being weeded. Out of 600 original seedlings, only 120 exist; and seedlings suppressed by weeds are very adversely affected.

Nilambur.—A Burmese bamboo (*Cephalostachyum pergracile*) was sown in June 1929 in a half-acre plot in the 1902 teak plantation in Amarampalam range. The object was to produce an underwood beneath the teak. The bamboo, which is evergreen and thornless and of very useful type, is doing extremely well. In some patches the culms are 6 feet high; and all are well stocked and healthy. The experiment is the outcome of advice received from Burma delegates at the 1929 Sylvicultural Conference at Dehra Dun. The subject of growing teak with admixture species capable of improving and protecting the soil was under discussion.

Palghat.—In the case of two species, *Albizzia odoratissima* and *Melia indica* experiment was made to ascertain whether complete ' stumping ' (as done in the case of teak) or partial lopping of the top and root, or entire transplanting gave the best results.

Planting was done between 11th and 13th of July 1930. The following table gives the result :—

Species.	Seedlings transplanted.	Top and root lopped and planted.	Stumps planted for comparison.
	NUMBER.	NUMBER.	NUMBER.
Albizzia odoratissima	56	60	46
Melia indica	67	76	50
Survivals on 9th December 1930.			
Albizzia odoratissima	47	37	41
Melia indica	48	36	32

CHAPTER VII.—ADMINISTRATION.

43. Mr. A. Wimbush held charge of the Circle throughout the year.

Tours.—The Chief Conservator of Forests inspected certain localities in Wynaad, Palghat and the Nilgiri divisions.

The Conservator of Forests spent 184 days in camp touring in all the divisions and inspection notes were written on the forests of North Mangalore, South Mangalore, Nilambur and Palghat divisions. All the District Forest Officers spent more than the prescribed minimum period in camp.

Inspection of District Forest and Range offices and sale depots.—The Conservator inspected all the District Forest offices and the District Forest Officers all Range offices in their divisions. All sale depots except Kasaragod depot and Nilambur Road Railway Station depot were inspected by District Forest Officers concerned.

District Forest Officer's accounts inspection.—The Accountant-General's staff inspected during the year the accounts of North Mangalore, South Mangalore and the Nilgiris. The accounts of Palghat division were inspected after the close of the year in May 1931. The accounts of Wynaad and Nilambur were audited by the staff of the Assistant Director of Commercial Audit.

Vernacular Training School.—The seventh session of the Vernacular Training School took place in the Palghat division between 1st May and 31st October 1930. Ranger T. G. Sankaran Nayar was Senior Instructor and Ranger S. Ramalinga Ayyar was Junior Instructor. Thirty out of thirty-one students finished the course. One student from Wynaad division returned to his division on account of illness. The thirty trained students included two foresters and twenty-eight guards. Only one student was awarded a first-class certificate, but all the remainder secured second class. The health of students was reported to have been poor.

Health of establishment and sanitation.—The health of establishment was reported to have been bad in all divisions except North Mangalore and the Nilgiris.

Sanitation.—Injunctions for the clearing of undergrowth for 100 yards round departmental buildings were obeyed in order to improve health condition.

Casualties—Wynaad.—Two forest guards died of malaria.

CHAPTER VIII.—GENERAL.

(1) Formation and Management of Panchayats.

(To include Forest Village System.)

44. North and South Mangalore divisions are the only divisions in which there are panchayats.

In the North Mangalore division, the management by panchayats of three reserves, viz., Tenkahola, Todar and Hosabetta, was continued, satisfactorily. The only panchayat in South Mangalore division, viz., Porkala, was closed during the year. This was on account of bad work and apathy on the part of the people. An immensity of trouble was taken by the forest officers of the two Mangalore divisions and by their staff, with the object of promoting panchayat management of reserves. This bore no fruit whatever. The impression generally seems to have been that the civil disobedience movement would end in the transfer of the reserves unconditionally to the people, and that participation in panchayats was therefore not worth considering. There were however village groups that were prepared to assume panchayat management on all our terms except that payments to Government even on the most modest scale could not be agreed to.

(2) MEASURES FOR IMPROVING LOCAL SUPPLIES AND FACILITIES.

45. The special concessions granted to the ryots of South Kanara were continued. The nature of the concessions is somewhat as follows :—

(1) Permission to clear undergrowth in all reserves (except those near to the coast) to a distance of half a mile from the limits of private holdings and to utilize the materials so cut for their own domestic and agricultural purposes subject to the condition that burning of the cut materials is not allowed in the reserved forest and provided also that the Forest Department may claim for departmental disposal any timber tree that may be cut.

(2) Clearing of undergrowth in the reserves near the coast to a distance of 200 yards from the limits of private holding.

(3) Clearing of undergrowth in all areas sown with Hopea.

(4) Free removal of green-manure leaves of unclassified species and dry leaves of all species and dead fuel.

(5) Permission to clear growth on footpaths and cart-tracks admitted as rights of way to a width of half a chain in the case of footpaths and one chain in the case of roads.

The North Mangalore District Forest Officer reports that the concessions are abused in reserves where there exists demand for manure leaves. The ' system ' is incompatible with our protective system, which places one forest guard, who is generally a local man of humble origin, in charge of thousands of acres of forest. " The difficulties of enforcing observance of any rules are insuperable, if the whole forest is to be inundated with villagers at any hours of the day or night." If the views of local officers are to be believed therefore, this concession arrangement is imperfect in operation.

The annual report on these concessions was submitted to the Chief Conservator of Forests in this office D. Dis. No. 409/31, dated 14th March 1931, and a further report in January 1932 has been called for in his No. 2537/C.1/31–1, dated 25th March 1931.

In South Mangalore, the concessions granted do not seem to have been availed of to any great extent.

In North and South Mangalore divisions, the maximum rates, which may be charged by the departmental coupe contractors for sale of forest produce to the public for domestic and agricultural purposes, were published in the District Gazette. As in previous years, logs and scantlings of different sizes were sold in retail at fixed rates at the sale depots in these two divisions.

Wynaad.—The local demand for forest produce is in general met from the extensive private forests and unreserved lands.

Nilambur.—Timber is extracted departmentally and is sold principally on the coast. There is sufficient produce for the domestic needs of the people from the extensive private forests.

No special steps needed for improving water-supply in grazing grounds. Rainfall in the Circle is copious. There were numerous cases in which ryots were given on payment of a nominal fee licences for use of water from jungle streams.

Under G.O. Ms. No. 295, Revenue, dated 7th February 1931, the licence-fee levied for water diversion in reserved forest has now to be credited to ' Revenue Department ' and not to ' Forests ' as hitherto.

(3) Timber and Sandalwood Transit Rules.

46. *Timber Transit Rules.*—These continue in force in all the divisions except the Nilgiris, and worked satisfactorily. The sanction of revised transit rules for Palghat division is under correspondence.

Sandalwood Transit Rules.—These are in force only in North and South Mangalore divisions and are reported to have worked satisfactorily.

(4) Jungle Tribes.

47. *North Mangalore.*—The ' Kudubies ' who live chiefly in the interior parts of Coondapoor taluk provided labour for fire-protection and manufacture of cutch as in previous years.

South Mangalore.—The Marattis and Malebudris still continue to practise shifting cultivation (kumris) in the unreserves of Kasaragod taluk but their activities in this respect are reported to be decreasing.

Wynaad.—The policy was continued of assigning forest lands to Kurumbars free of assessment with a view to getting them to settle down. The cess on these lands is paid departmentally. The Kurumbars were also allowed free grazing. No advances for purchase of cattle for cultivation were given during the year.

The Nilgiris.—The Kurumbars in the Mudumalai range continue to be employed as elephantmen. They also co-operate with us in tuckle cultivation. Kurumbars and Chetti ryots who live within the forests have been given lands free, or on nominal fee, on condition that they supply labour to the department. In Sigur range, the Kasubas were as usual encouraged to settle in Anaikatti by grant of lands for cultivation. In Coonoor range, the Irulars and Kurumbars were employed in the extraction of sandalwood and in clearing the district boundary; and were also given land free or at nominal rent.

Palghat.—There are seventeen settlements, Irulars and Kurumbars mostly, in Bolampatti and Mannarghat ranges. These people are of service as labour for forest works, and are given lands free of assessment.

In the Bolampatti range, ponam cultivation was done with the help of Irulars of Bolampatti valley.

(5) Mining and Quarrying.

48. Nil.

(6) Livestock.

49. *Elephants.*—We had 90 elephants at the beginning of the year. During the year, 13 were captured, and 4 calves were dropped, bringing the total to 107. Two calves died, one calf escaped, and one grown male was destroyed on account of blindness. Eight elephants were sold for Rs. 5,330. Two elephants were sent to a Zoo in Australia. Thus the number at the end of the year was 93.

Other animals.—There were 32 buffaloes, 4 bulls and 5 asses. Six buffaloes were sold. The balance at the end of the year was 26 buffaloes, 4 bulls and 5 asses.

(7) Veterinary Establishment.

50. As in previous years, there were two Assistant Veterinary Inspectors, one for Nilambur and the other for Wynaad and the Nilgiris. The Inspector of Livestock supervised the work of these two assistants and in addition, attended to livestock of South Kanara and Palghat.

The work of Veterinary officers attached to the Forest Department was assiduous. No doubt exists that the care taken of departmental animals is ever improving.

(8) Civil Suits.

51. *South Mangalore.*—A suit was brought against Government by V. Krishnayya, lessee of cardamom estate, Kombar reserved forest, for recovery of land-cess collected by the Revenue Department alleging that under the terms of the lease-deed executed by him and this department, he is not liable to pay the land-cess on the cardamom area. The suit was dismissed with costs by the District Munsif, Puttur.

Nilambur.—The decree obtained against the Uralan of Trikkalayur devaswam referred to in the last report was executed during the year. The Uralan has deposited Rs. 3,739-10-9 towards the decree amount. The Collector is reported to be taking action to dispose of the matter.

The appeal preferred by Naduvath Subrahmanyan Nambudiripad in the District Court referred to in the last report, was dismissed with costs to Government. The matter is in the hands of the Collector.

The suit filed by Mr. Rajeswaran, sawing contractor in Beypore depot, referred to in the last report was not heard during the year.

The suit filed in the District Munsif's Court, Calicut, against A. P. Kunhiperachan, ex-lessee of Beypore coconut tope, and referred to in the previous report was decreed in favour of Government. The Collector is taking execution proceedings to recover the amount.

ANNEXURE.

North Mangalore Division.

Description.—The forest division consists of the northern portion of the South Kanara district. The important timber forests are situated on the western slopes and the Terai of the Western Ghauts up to the Mysore Frontier. On the ghaut slopes 'Kumri' cultivation and the permit system of the past have been responsible for the disappearance of most of the marketable timber. The heaviest stand of timber is now found along the ghauts between 1,500 and 2,000 feet above mean sea level. The forests on the ghaut slopes are both evergreen and deciduous and some of the trees, notably Poonspar (*Calophyllum elatum*) and Kiralbhogi (*Hopea parviflora*) attain an immense size. As we approach the coast the quality of the forest deteriorates as the population and cultivation increase. The outlying hills near the coast are fuel

forests. *Acacia Sundra* is a special feature of some of the forests near the coast. It is confined to the laterite hilly plateau between the sea and the ghauts in Coondapoor taluk.

2. *Area of reserved forests and lands.*—The total area of the reserved forests at the close of the year was 359 square miles.

Reserved lands.—Nil.

3. *How the forest district is split up into subordinate administrative charges—*

Name of range.	Number of beats.
1. Coondapoor	18
2. Shankaranaraina	10
3. Udipi	14
4. Mangalore	8
Total ...	50

To help the four Rangers in the execution of work and for protection of reserves there is a staff of 15 foresters and 68 guards and watchers.

4. *Cost of administration—*

	RS.
District Forest Officer	10,876
Forest Rangers	11,542
Subordinate staff	22,446
Clerical and menial staff	9,455
Miscellaneous including contingencies	2,529
Total ...	56,848

5. *Cost under other important heads—*

	RS.
Timber operations	25,771
Firewood	...
Sandalwood	1,000
Feed and keep of livestock	5,075
Regeneration	2,300
Protection from fire	2,108
New works—Buildings	567
Do. Wells	839
Other miscellaneous items	6,299
Total ...	43,959

6. *Income from main sources—*

From reserves.

	Rs.
Timber	37,096
Firewood	13,226
Grazing	5,294
Other minor produce	4,156
Miscellaneous revenue	8,813
	68,585
Deduct—Refunds	84
Total ...	68,501

From unreserves.

Timber	5,182
Firewood	6,028
Sandalwood	6,000
Bamboos	2
Other minor produce	1,120
Total ...	18,332

7. *Chief works done in the division—*

(1) Exploitation of timber in three centres amounting to 48,210 cubic feet to supply sleepers to the railways and timber to the coast market.

(2) Extraction and marking of $6\frac{3}{4}$ tons of sandalwood.

(3) The Inspection bungalow at Kervashe was completed.

(4) (i) Artificial regeneration of 65 acres with Hopea and 4·40 acres with teak, etc.

(ii) Preparation of 91 acres for artificial regeneration of Hopea and 4 acres for teak, etc., sowings.

(iii) Tending of 2,885·08 acres of artificially regenerated areas.

(5) Fire-protection operations, the area under special protection being 72,219·60 acres.

South Mangalore Division.

Description.—The division extends from near Kudremukh Hill (the highest point in the Western Ghauts of South Kanara) on the north, to Malabar on the south, the Arabian Sea on the west and up to Coorg and Mysore on the east. It covers the slopes of the Western Ghauts and their foot-hills and is drained by the Netravati, Kumardhari, Chandragiri and Nileshwar rivers. The highest peak, Kudremukh, is 6,200 feet above sea level.

The lower slopes of the ghauts and the foot-hills are clothed with dense evergreen and semi-evergreen forests containing magnificient trees, but the majority of them are of unsaleable species, the principal useful species, being Hopea, Poonspar, *Terminalia tomentosa*, *Terminalia paniculata*, Xylia and also some scattered white cedar and wild jack. Trees up to 150 feet in height and 15 feet in girth are not uncommon. Ebony, red cedar and Acrocarpus also occur to a very limited extent in some localities. Five varieties of canes are found in evergreen belts and of these the Naga (Cobra) cane is the most sought after. Bamboos and reeds occur in plenty. There are three cardamom estates on the steep upper slopes of the ghauts.

Next to the semi-evergreen is the deciduous zone which yields fairly large quantities of timber and fuel. The principal species of these forests are teak, Xylia, Terminalias, rosewood, benteak (*Lagerstræmia*), *Pterocarpus marsupium* and *Albizzias*. A small quantity of sandalwood is found, but practically the whole of it occurs in unreserves and in kumaki lands.

The rainfall is very copious and in Nalkur at the foot of the ghauts 212 inches were recorded in the year 1930.

2. *Area of reserved forests and lands.*—Four hundred and forty-seven square miles.

3. *How the forest district is divided into subordinate administrative charges—*

Name of range.	Number of beats.
1. Puttur	14
2. Kasaragod	14
3. Uppinangadi	9
4. Beltangadi	6
Total ...	43

To help the four Rangers in the execution of work and for protection of reserves, there is a staff of 14 foresters, 59 guards and watchers.

4. *Cost of administration—*

	RS.
District Forest Officer and Assistant Conservators.	17,678
Rangers	8,100
Subordinate and protective staff	20,638
Clerical and menial staff	9,834
Miscellaneous including contingencies	3,497
Total ...	59,747

5. *Cost under other important heads—*

	Rs.
Extraction of timber	51,127
Feed and keep of livestock	11,221
Regeneration	3,378
Protection from fire	1,914
Roads—New works	901
Buildings—New works	1,815
Other miscellaneous items	6,456
Total ...	76,812

6. *Income from main sources—*

From reserves.

	Rs.
Timber	1,40,242
Firewood	2,587
Bamboos	381
Grazing	10,114
Minor produce	2,573
Other miscellaneous items	10,529
	1,66,426
Deduct—Refunds	975
Total ...	1,65,451

From unreserves.

	Rs.
Sandalwood	3,500
Timber	8,619
Firewood	2,149
Other minor produce	1,666
Bamboos	36
Total ...	15,970

7. *Chief works done in the division.*—The principal activities of the division during the year were the extraction of 66,000 cubic feet of timber (for supply to railway as railway sleepers and for the coast market). Conversion and transport of timber felled in previous years, at a total cost of about Rs. 50,000. Upkeep of Hopea regeneration areas about 5,600 acres; and formation of new plantation over about 344 acres. About $3\frac{3}{4}$ tons of sandalwood were extracted. The Working Plans Officer was engaged throughout the year in preparing a working plan for the division. A distance of 29 miles of the frontier political boundary was inspected this year.

WYNAAD DIVISION.

Description.—The Wynaad Forest division covers the northern strip of Malabar from the Nilgiris district on the east to Tellicherry on the west and borders Coorg and Mysore on the north. On the Western Ghauts, their slopes (both east and west) and foot-hills, is good evergreen tropical jungle. On the coastal plain immediately west of the ghauts is semi-evergreen and deciduous forest of fair quality. On the Wynaad plateau, east of the ghauts, is good deciduous forest, gradually deteriorating towards the east to the borders of the Nilgiris, where the forest is rather stunted with large expanses of tall and dense elephant grass. The rainfall varies from 67·05 inches at Boothakkal to 183·80 inches at Kannoth.

The elevation of the plateau is a little under 3,000 feet on the average. It is hilly with occasional hills rising to over 5,000 feet. The forests of the ghauts and Wynaad plateau are very malarial.

2. *Area of reserved forests and lands.*—Two hundred and sixty-three square miles, most of which is on the plateau.

3. *How the forest district is divided into subordinate administrative charges—*

Name of range.	Number of beats.
1. Kannoth	5
2. Begur	8
3. Chedleth	...
4. Sultan's Battery	...
Total ...	13

Although there are only four ranges, yet on account of extensive timber and regeneration operations and to make allowance for frequent illness, an additional staff of Rangers has to be retained. These Rangers are helped by a staff of 19 foresters and 60 guards and watchers. Chedleth and Sultan's Battery ranges are not divided into beats for protective purposes as owing to their remote situation, little protection is required. The staff of guards is however fully employed in the execution and supervision of numerous important forest works such as timber extraction, regeneration and tending.

4. *Cost of administration—*

	RS.
District Forest Officer and his assistant	29,122
Rangers and Assistant Veterinary Inspector ...	8,527
Subordinate protective staff	54,874
Clerical and menial staff	12,397
Miscellaneous including contingencies	3,692
Total ...	1,08,612

5. *Cost under other important heads—*

	Rs.
Extraction of timber	1,97,119
Feed and keep of livestock	34,436
Regeneration	16,912
Protection from fire	1,555
Purchase of livestock	3,398
Buildings—New works	734
Roads—New works	735
Other miscellaneous items	29,750
Total ...	2,84,639

6. *Income from main sources—*

From reserves.

Timber	3,45,071
Bamboos	929
Grazing	3,898
Other minor forest produce	5,253
Other miscellaneous items	11,054
	3,66,205
Deduct—Refunds	446
Total ...	3,65,759

From unreserves.

Timber	3,744
Firewood	709
Other minor produce	1,024
Total ...	5,477

7. *Chief works done in the division.*—The chief works were:—

Exploitation.—Three hundred and eighty-eight thousand six hundred and sixty-seven cubic feet of timber felled and converted and partly transported to Mysore and Nanjangod depots for sale, some sold in forests, and some converted into sleepers for supply to railways.

Regeneration.—Billetting and burning of tree-debris, preliminary to planting, was carried out over 135 acres. Planting was done on 178 acres. One thousand three hundred and seventy-four acres of plantations were tended.

Elephant-capturing operations.—These were conducted at a cost of Rs. 2,083. Three elephants valued at Rs. 4,000 were captured.

NILAMBUR DIVISION.

Description.—The Nilambur Forest division lies in the watershed of three rivers, the Chaliyarpuzha, the Karumpuzha and the Punnapuzha, and their tributaries. The three join near Nilambur, and the main river thus formed is known as the Chaliyar. It forms the principal means of export for the Nilambur timber, most of which is floated down to Beypore on the coast for sale. The bulk of the area of the division is in a compact block, situated on the outer slopes and foot-hills of the Kundah range of the Nilgiris, from 8,200 feet down to 120 feet elevation. The remainder consists of scattered blocks in the plains (mostly held by Government on lease) and it is these blocks which contain most of the famous Nilambur teak plantations. These plantations cover an area of about 10 square miles and are all situated close to the main rivers.

The natural forests are of the mixed semi-deciduous type up to an elevation of about 2,500 feet. Between 2,500 and 5,000 feet the forests are mostly evergreen. Above 5,000 feet tree growth is scattered and stunted, and most of the vegetation consists of grass only. Of the natural forests, the semi-deciduous type is the more valuable both from the point of view of superiority of species in the timber market and by reason of accessibility for extraction. The finest growth in this type of forest is in the foot-hills and up to about 2,000 feet on the slopes. Only the lower portions of the semi-deciduous forests are being worked at present, though a project for extending exploitation to higher elevations is under consideration.

2. *Area of reserved forests and lands.*—One hundred and twenty-six square miles.

3. *How the forest district is split up into subordinate administrative* charges—

Name of range.	Number of beats.
1. Nilambur	4
2. Amarampalam	1
Total ...	5

There is no regular subdivision into protective units, practically all the subordinates being employed in supervising the very extensive exploitation and regeneration works, hence the apparently small number of beats.

To help the two territorial Rangers in extensive timber and regeneration operations, there are always two or three assistants or special duty Rangers. In addition, there are 20 foresters and 37 guards and watchers.

4. *Cost of administration*—	Rs.
District Forest Officer and his assistant	18,367
Rangers and Assistant Veterinary Inspector ...	11,467
Subordinate protective staff	17,171
Clerical and menial staff	10,879
Miscellaneous including contingencies	1,397
Total ...	59,281

5. *Cost under other important heads*—	
Timber operations	1,31,818
Bamboos	10,618
Feed and keep of livestock	30,770
Regeneration	24,382
Fire-protection	3,772
Buildings	14,938
Roads	40,839
Other miscellaneous items	8,921
Total ...	2,66,058

6. *Income from main sources*—	
Timber	4,92,837
Bamboos	7,492
Minor forest produce	5,363
Sale of elephants and cattle	3,350
Total ...	5,09,042

7. *Chief works done in the division.*—The main works are large scale timber and regeneration operations, which are summarized as follows:—

	C. FT.
Final clearfelling and extraction in mature teak plantations	68,300
Final clearfelling and extraction in natural forests.	143,500
Subsidiary (selection) fellings and extraction in natural forests	49,100
Handsawing of sleepers—3,817 Broad Gauge and 12,885 Metre Gauge sleepers were supplied to railways.	
Thinning in teak plantations 689 acres yielding ...	119,600
	ACS.
Regeneration with teak on old plantation clearings ...	48
Regeneration with teak on natural forest clearings ...	150
Regeneration with miscellaneous species	79
Tending of young plantations	376

In the year two elephants were captured. Another important activity was fire-protection of the valuable plantations and of the natural forests.

THE NILGIRIS DIVISION.

Description.—The forest division extends over the whole of the Nilgiris district. In the south-west, stretching from the lofty crests overlooking Malabar to Ootacamund town lie the grass covered downs (the Kundahs). The centre south and south-east of the plateau, which once might have been evergreen forests, is now occupied mainly by Badaga cultivation and flourishing tea estates. The north and north-east of the district is mainly reserved forests which are of great climatic use in protecting the outer slopes, but scarcely of any economic value except for some sandalwood in the lower dry belts. The Mudumalai forests occupying the north-west corner of the district, and with on average elevation of about 3,000 feet contain valuable species such as rosewood, teak and the terminalias, but the quality of the timber is much degraded from over-exploitation at the end of the last century and by constant fires. The Mudumalai reserve came into the possession of the Forest Department by purchase from the Tirumalpad of Nilambur, only in the year 1919.

2. *Area of reserved forests and lands.*—Four hundred and ninety-one square miles.

3. *How the forest district is split up into subordinate administrative* charges—

	Name of range.	Number of beats.
1.	Ootacamund	17
2.	Coonoor	22
3.	Segur	7
4.	Mudumalai	9
	Total ...	55

The four rangers were assisted by a staff of 12 foresters and 67 guards and watchers.

4. *Cost of administration*—

	RS.
District Forest Officer and his assistant ...	14,572
Rangers	15,969
Subordinate protective staff	24,643
Clerical and menial staff	12,586
Miscellaneous including contingencies	4,348
Total ...	72,118

5. *Cost under other important heads—*

	Rs.
Timber	9,379
Firewood	18,007
Sandalwood	2,298
Feed and keep of livestock	7,028
Elephant-capturing operations	2,249
Regeneration	4,283
Fire-protection	2,919
Buildings—New works	596
Other miscellaneous items	11,477
Nilgiri Game Association	4,833
Total ...	63,069

6. *Income from main sources—*

From reserves.

Timber	17,228
Firewood and charcoal	35,114
Sandalwood	12,195
Bamboos	1,701
Grazing	5,742
Minor produce	3,696
Other sources including shooting licence-fees.	22,042
Total ...	98,285
Deduct—Refunds	904
Net Total ...	97,381

From unreserves.

Timber	212
Firewood	298
Bamboos	...
Minor produce	57
Total ...	567

7. *Chief works done in the division.*—Timber and elephant-capturing operations in Mudumalai range, departmental fuel operations and planting in Ootacamund and Coonoor ranges and extraction of sandalwood in Sigur and Coonoor ranges.

Palghat Division.

Description.—The forest division covers the portion of the Western Ghauts to the south of North Coimbatore, the Nilgiris and Nilambur Forest divisions and north of Palghat Gap. Important deciduous

forests of Bolampatti valley and Walayar and evergreen forests of Chenat Nair, Attapadi and Silent valleys are the chief reserves included in this division. Various types of forests ranging from dry scrub jungle of Thadagam valley with less than 20 inches of rainfall to the virgin evergreen forests of the Silent valley receiving over 200 inches of rainfall are found in this division.

2. *Area of reserved forests and lands.*—Two hundred and sixty-two square miles.

3. *How the forest district is split up into subordinate administrative charges—*

Name of range.	Number of beats.
1. Palghat	10
2. Bolampatti	10
3. Mannarghat	10
Total ...	30

A staff of 14 foresters and 73 forest guards and watchers helps the three Rangers in the execution of works and protection of reserves.

4. *Cost of administration—*

	Rs.
District Forest Officer	12,498
Extra Assistant Conservator	8,140
Rangers	10,530
Subordinate and protective staff	20,228
Clerical and menial staff	6,689
Vernacular Training School	10,254
Miscellaneous including contingencies ...	3,240
Total ...	71,579

5. *Cost under other important heads—*

Timber operations	1,13,726
Bamboos	705
Feed and keep of livestock	6,908
Regeneration	5,679
Fire protection	2,711
Roads and bridges—New works	2,451
Buildings—New works	409
Other miscellaneous items	16,212
Total ...	1,48,801

6. *Income from main sources—*

		Rs.
	From reserves.	
Timber		1,36,080
Firewood		58,619
Bamboos		15,729
Grazing		4,453
Minor produce		6,825
Miscellaneous items		10,012
	Total	2,31,718
Deduct—Refunds		751
	Total	2,30,967
	From unreserves.	
Timber		3,338
Firewood		2,371
Minor produce		3,303
	Total	9,012

7. *Chief works done in the division—*

(1) Sleeper operations in Silent and Kalladikot valleys.

(2) Improvement to the road from Nadupathi to Varalipadi Coupe IV.

(3) Digging a well for the District Forest Officer's quarters.

(4) Regeneration operations in Silent valley.

(5) Teak planting in Dhoni Coupe II, Varalipadi Coupe IV (Completion) and Elival Coupe III.

(6) Elephant-capturing operations in Bolampatti valley. Two elephants valued at Rs. 850 were caught.

OOTACAMUND,
31*st August* 1931.

A. A. F. MINCHIN,
Conservator of Forests, Sixth Circle.

ADMINISTRATION REPORT OF THE MADRAS FOREST COLLEGE, COIMBATORE, FOR THE PERIOD OF 1ST APRIL 1930 TO 31ST MARCH 1931.

CHAPTER I.—CONSTITUTION.

Board of Visitors.—Mr. R. D. Richmond, I.F.S., Chief Conservator of Forests, was ex-officio President of the Board of Visitors throughout the year.

The following officers were on the Board during the year:—

Name of officer.	Period.
1. Mr. A. Wimbush 2. Mr. C. C. Wilson 3. Mr. T. Clear	Throughout the year.
4. Mr. J. H. Longrigg ...	14th April 1930 to 16th April 1930.
5. Mr. F. R. Madan ...	17th April 1930 to 31st March 1930.
6. Mr. T. A. Whitehead ...	1st April 1930 to 6th February 1931.
7. Mr. K. R. Venkataramana Ayyar	1st April 1930 to 14th May 1930 and 7th February 1931 to 31st March 1931.
8. Mr. A. A. F. Minchin ...	15th May 1930 to 31st March 1931.

Staff.—Mr. J. C. Wrench continued as Principal throughout the year.

The following officers held appointments as Instructors:—

Mr. E. B. Ramachandra Rao.	First Senior Instructor, 1st April 1930 to 14th July 1930. Second Senior Instructor, 15th July 1930 to 31st March 1931.
Mr. A. L. Griffith	From 15th July 1930 as First Senior Instructor.
Mr. P. W. F. Walpole ...	From 1st April 1930 to 10th July 1930 as Second Senior Instructor.
Mr. C. M. Belliappa	Throughout the year as First Junior Instructor.

As mentioned in last year's Administration Report, the post of Second Junior Instructor was being held in abeyance as a measure of economy: this continued throughout the present year.

Mr. K. Venkatarama Ayyar, Medical Officer, Lawley Road Dispensary, was relieved by Mr. Tyagaraja Ayyar. Mr. G. Viswanatha Ayyar continued as Curator of the Gass Forest Museum and

Mr. K. S. Venkata Rao as Office Manager. The office of the Estate Overseer and Storekeeper were held by the same incumbents as last year as also the posts of senior and junior havildar.

CHAPTER II.—INSTRUCTION.

Teaching.—Lectures were delivered at headquarters to students in accordance with the College time-table. A new feature in this year's tutorial method was the introduction of a projection lantern to illustrate certain lectures.

This proved quite a useful ' aid ' to instruction and has certainly increased the students' interest in the subjects.

Practical training at headquarters.—This was given as usual on Saturdays and on a number of other week days. The students were given exercises in silviculture, engineering and survey works on the College estate.

Opportunity was also taken to visit certain buildings in course of construction in the vicinity of the College.

Special lectures.—In October 1930 at headquarters, the College had the pleasure of being addressed by Dr. Lyon, Government Botanist, in the Hawaiian Islands on ' Some Forest Problems in the Hawaiian Islands.' Dr. Lyon was at the time on a tour of inspection in Coimbatore.

In camp as opportunity offered certain officers on special duty were asked and were kind enough to give short talks—illustrated in some cases, by demonstrations, regarding the work upon which they were engaged.

The Sub-Assistant Surgeon with each camp gave lectures on camp hygiene and malaria.

The students during the course of their tours visited the following places of technical interest:—

(1) The Standard Furniture Company, Limited, Kallai.

(2) Saw Mills, Messrs. Parry and Company's Mills and Timber Yard.

(3) The Beypore depot.

(4) Pollachi Timber depot where the officers in charge were kind enough to show them round and explain objects of interest.

Results of Examination—1929–30 Division.—The senior division students of the year numbered 15; one of whom was from Madras. All passed the final examination and all except two obtained Higher Standard certificates. No Honours were awarded. The percentage highest marks in class examination was 81, the

lowest 61·5 and the class average 71; while in the final examination percentage highest was 76·7, the lowest 57·5 and the class average 65.

Messrs. R. S. Browne, W. G. Dyson, M. S. Raghavan, V. G. Darrington, D. L. Sathe, H. P. Ward, D. M. Currie and M. V. Laurie, conducted the final examinations in June 1930. On account of ill-health Mr. Laurie could not examine in orals in his subject and this portion of the examination was taken by Mr. D. L. Sathe.

First-aid final examination for the seniors was held in April 1930. The Assistant District Medical Officer, Mr. G. Sankaran Tampi, B.A., M.B.B.S., conducted the examination. All students passed the test excepting one and received certificates of proficiency from the Saint John's Ambulance Association.

In considering the reports on the final examination the Board of Visitors stated that fewer students were of outstanding merit; but that the attainment of the average student varied little from that of the last four years.

The following certificates were awarded in order of merit:—

Number and name of student.	Province from which he comes.
1. S. L. Dube *	Central Provinces.
2. K. M. Thomas	Bombay.
3. Balakadas	Court of Wards.
4. E. Cameron	Central Provinces.
5. M. Gopalaswami Nayudu ...	Madras.
6. Nirpat Singh Tomar	Central Provinces.
7. L. V. Joshi	Do.
8. Brij Raj Singh	Do.
9. L. S. Mutkekar	Bombay.
10. A. B. Phadke	Jawahar State.
11. R. S. Deshpande	Bombay.
12. H. B. Mohssin	Hyderabad.
13. Y. K. Vaze	Bombay.
14. M. M. Asddi	Do.
15. S. L. Parasar	Central Provinces.

Government and other prizes were awarded as follows:—

1. Gold Medal for the best senior student on marks	S. L. Dube.
2. Campbell-Walker Prize for the best student in Forestry	Do.
3. Brazier Prize for the student likely to make the best outdoor Ranger.	Do.
4. Lodge prize for Engineering.	Do.

* Was also the first student in the Junior year.

5. Madras Conservator's Prize for Survey and Drawing	1. S. L. Dube.
6. Madras Conservator's Prize for Botany	1. Do. 2. R. S. Deshpande.
7. Madras Conservator's Prize for Range Administration	M. Gopalaswami Nayudu.
8. Chief Conservator's Prize for the best junior student	H. Sen Gupta.
9. Indian Forester Prize for an essay by present students	Do.
10. Pentland Shield for the best all-round athlete	B. R. Singh.
11. Fischer Cup for tennis	Abdul Hamid.
12. Moopil Nair Cup for cross country race	B. R. Singh.
13. Swimming Medal	S. L. Dube.
14. Cowley-Brown Cup for inter-divisional hockey	1929–31 division.
15. Prize for the best essay in the Madras Forest College Magazine—	
1928–29	Jai Singh Jaswal.
1929–30	R. B. Gupta.

Prize distribution.—The annual prize-giving was held at the College on the 1st July 1930, when His Excellency Lieutenant-Colonel The Right Honourable Sir George Frederick Stanley, P.C., G.C.I.E., C.M.G., Governor of Madras, gave away the prizes and certificates to the students. This was followed by a garden party, given by the Chief Conservator of Forests, in the College grounds.

1929—1931 *Division.*—The strength of this class was 16 : there were no Madras Government or private students. Students were sent from Central Provinces, Bombay, Hyderabad, Indore, Rewa, Bonai, and Bamra States.

The Final Examination in Physical Science for this division was held in June 1930. The result showed the general standard of knowledge to be satisfactory.

The Chief Conservator's Prize for the best student of this division was awarded to H. Sen Gupta, a student from Bonai State, Orissa Feudatory States.

1930—1932 *Division.*—This division, the present seniors, number 20. Eighteen of these are from outside provinces and States and two are private students from Madras Presidency.

In the first periodical examination held in November 1930 the standard maintained was satisfactory. The percentage highest marks was 74, the lowest 57 and the class average 69.

CHAPTER III.—ADMINISTRATION, TOURING, HEALTH, AND CONDUCT.

The Board of Visitors' meeting was held on the 30th of June 1930.

In Range Administration, the Board decided that there should be two written papers in the subject; one without books and the other with books carrying with it a redistribution of marks.

The temporary reduction of the post of one Instructor as mentioned in last year's administration report was reconsidered by the Board of Visitors and was ordered to remain in force.

The Principal's recommendation that the working plan prescriptions for the College Demonstration forest should be cancelled with the exception of those works under regeneration, was considered and accepted.

As regards the use of tents in camp, the Board considered that Walayar, Bolampatti, and Mount Stuart camps could better be served by tents than by huts (grass, bamboos). The question of supply of tents was ordered to be taken up by the Principal with the Chief Conservator.

The Board decided that the Sappal-Olavakkot camp should, for reasons of health and better study, be held elsewhere, and, as a provisional measure, Silent Valley in Palghat division was agreed upon.

The Board approved the Principal's suggestion that a projection lantern and slides be purchased for use as an ' aid ' to lectures.

Tuition fees.—As a point of interest it may be noted that the concession of the reduced rate of tuition fees for private students from Madras Presidency for the whole course of 23 months was taken advantage of by two students. A further concession was granted enabling payment to be made in two equal instalments.

Touring.—The camping during the year was carried out in accordance with the sanctioned programme. Thondakulam was the site of the camp during the tour at Silent Valley, Palghat division.

The following brief details give the camps visited and outline the more important subjects studied and practical works performed. These are shown, for convenience, under subject heads.

Arambyshola camp—April-May 1930.—This is the final camp for seniors and much of the time is taken up with practical examinations.

In Silviculture the second portion of the fourth half-yearly examination was held and in Survey and Forest Management (Working Plans) the final took place.

Further study, begun the previous year at Bandyshola camp, of shola species and exotics, was continued.

In Engineering students prepared their road plate and estimate.

Bandyshola camp, Coonoor—April–May 1930.—This is a junior division camp and affords students, as a rule, their first introduction to shola and exotic types of forest vegetation.

In Botany and Silviculture, students studied the various exotic and shola types met with in the vicinity. Sample plot measurements were made.

Under Survey and Engineering, the following was done:—Verification of reserve boundaries, survey and map-making by trailer-tape, study of certain buildings, and the preparation of road estimates.

Students constructed a charcoal kiln manufactured charcoal, ascertained its cost, and visited certain local eucalyptus oil distillations to see the process followed.

Walayar—August 1930.—This is the first camp of senior students. As noted in last year's administration report it was decided that the management as regards silvicultural treatment was to be that of the sanctioned working plan for the district for the Pole (coppice) Working Circle.

Instruction was given in tending (weeding and cleaning) on these lines and was carried out wholly by students.

Under Survey, coupes of 1931 and 1932 were surveyed and mapped with the aid of trailer tape and abney level; boundary stones were placed.

Sadivayal camp—September–October 1930.—This being the first camp for the junior division instruction was confined to simple studies relating to this forest.

In Botany a study was made of the characters of the more important trees and shrubs. The silvicultural characteristics of certain trees received special note: opportunity was taken to study the artificial regeneration to be seen at this camp.

Under Survey and Engineering various simple exercises were done after the use of instruments had been taught.

Range administration was studied and a visit was made to the Range office.

Topslip—November–December 1930.—Instruction in Botany was continued and the study of road construction and bridges and the principles of constructions of suspension bridges.

Under silviculture, artificial regeneration of pure and mixed crops, afforded material for study.

Karianshola and the deciduous natural forest of Schali were visited.

Practical examinations in Botany, Utilization, Engineering and Survey were held.

The Conservator, Fifth Circle, gave to the students an outline of the history of the Mount Stuart plantations and lessons learned.

Students witnessed elephant-capturing operations.

Karguḍi camp—January-February 1931.—This camp permits the study of a deciduous forest of mixed species and sandal regeneration, but chiefly at this period of the year of anti-fire operations.

The students received practical instruction in fire-protection, road alignment, in Botany and Engineering. They studied the method of extraction, classification and disposal of timber and sandal regeneration.

Nedungayam camp—November-December 1930.—The matter for study in this camp is considerable and includes all subjects, but chiefly, Forest Management and Silviculture.

The third half-yearly examinations in Forest Management, Botany, Survey and Utilization are held here.

On their way to Nilambur students stopped at Calicut for three days and visited the several places of technical interest such as the Standard Furniture Company, Kallai, Beypore Depot, and Saw Mills, Messrs. Parry and Company's Saw Mills and Timber Yard.

Excursions were made to the natural and to the artificially created forests. The silviculture, as locally applied, of teak and other species but principally teak was fully studied. Figures relating to growth and yield were collected.

Under Engineering the students visited bridges and roads under construction. Levels were taken for a bridge over river and estimates prepared.

A number of photographs, representations of certain types of forest crops and certain forms of tending, were taken.

Exploitation and Utilization were fully studied.

Silent Valley—January 1931.—This camp lends itself principally to the study of evergreen forests, botanically and silviculturally, and to problems of exploitation.

Numerous botanical excursions were made.

The presence of a working plan party engaged upon enumeration of the forest in the vicinity of the camp offered a good opportunity for the study and practice of this particular type of work.

A number of photographs were taken.

Practical examination in Silviculture and Range Administration took place.

Tour journals.—A record of work done in the various camps is maintained by each student in form of a Tour Journal for which marks are awarded. Any work carried out by students of use to the Divisional Officers is communicated to them.

Inspection.—The students were inspected in camp at Arambyshola (April–May) by the Chief Conservator of Forests and by the Conservator, Fifth Circle, at Topslip (November–December).

Health.—The health of the students both in College and camp has been satisfactory, with the exception of one student who developed typhoid in September 1930.

Suitable precautions were taken. Food and food sources and sanitary conditions were all investigated.

The system of regular exercise consisting of compulsory games and drill and physical training combined with regular medical attendance undoubtedly turns out a healthy and alert student.

Students are weighed on arrival and before leaving the College. It is of interest to note that it is the general tendency for students to show an increase of weight in their second year.

CHAPTER IV.—THE GASS FOREST MUSEUM AND COLLEGE LIBRARY.

Museum.—The Museum continued to afford useful instruction to the students and to be an object of interest to the general public; the latter is shown by the number of visitors which increased from 32,857 to 33,060.

At the beginning of the year, it was thought that the value and usefulness of the Museum could be increased considerably in certain respects, viz., by the adoption of more correct and up-to-date nomenclature; by certain re-arrangement and augmentation of exhibits; by the addition of manufactured articles of technical interest. The year closed with much of this programme completed. In enlargement of the above it may be noted that—

Upon request, the Forest Research Institute, Dehra Dun, was good enough to send certain ply wood articles in which the successive stages of construction were clearly shown. Among the articles sent was a model door in modern design done in veneer; the core being faced on one side with quartered laurel veneer and on the other with poon.

A new section was opened under the heading ' The Industrial uses of Wood '. This sought to illustrate that certain timbers are best suited for certain specific uses. This section is still being stocked.

The photographic collection was enriched by the addition of some useful photographs taken in the various camps visited. A few of these were sent to the Forest Research Officer, Madras. A large number of selected negatives were obtained from the latter and prints taken from them, for instructional purposes.

In addition, upon application, many local divisional officers were good enough to supply articles of minor forest produce and specimens for the herbarium.

A number of selected botanical specimens were sent to the Imperial Forestry Institute, Oxford University.

2. *Library.*—A complete stock-taking and revision of the cataloguing and classification was in progress. This was found necessary as the existing classification had proved inadequate. In spite of the comparative smallness of the Library the work remained incomplete at the end of the year, being hindered by camping periods.

Eighty-eight new volumes of technical and general interest were added to the Library and a large number of old volumes were rebound.

CHAPTER V.—SUPERVISION, WATER-SUPPLY, ROADS, BUILDINGS, ETC.

Supervision.—In general this was satisfactory. The difficulty alluded to in last year's report still exists. Attempts, as a measure of economy, to obtain wire or barbed wire fencing by transfer from within the department failed; except for a few hundred feet and no second hand material was available with the Public Works Department. The need still exists and to a greater degree as the prickly-pear is fast being destroyed by the cochineal insect.

Water-supply.—This is now satisfactory. A new Hornsby 6 horse power pumping engine was installed under proper authority in the place of a Tangye which was old and beyond satisfactory repair.

Roads.—All the existing roads have been kept in repairs though in the case of the more used roads not as well as they need to be.

It has to be recognized that Coimbatore town has grown and that the College is no longer an isolated unit in an unvisited outskirt: the College estate is now a fairly popular place due, for one reason, to the increase in motor cars. Accordingly, larger funds are now required for the greater wear and tear of roads.

Buildings.—Their condition is satisfactory. Repairs have been carried out. The semi-permanent sheds at Arambyshola and Bandyshola call for better attention. Painting and wood-oiling are required. This matter will be reported, separately.

CHAPTER VI.—GENERAL.

College Estate and Arboretum.—The working plan approved in 1921 for working the College estate was cancelled by the Chief Conservator during the year and the management of the estate was left to the Principal to be done to the best advantage on arboricultural lines, cutting and selling such trees as should be removed and replacing them by others of greater interest. In conformity with this order several of the coupes were thinned and planted or sown.

It is hoped to make the College arboretum more representative as funds permit. With this in view about 35 different species of plants of botanical interest were obtained from Agri-Horticultural Society, Madras, and planted in the arboretum.

Sowing and planting in certain coupes and along avenues was done.

Stock-taking.—The stock at the College was checked in detail in July 1930 by the staff and the articles found useless or unserviceable were written off under proper sanction.

Games.—The standard maintained has been satisfactory and in athletics distinctly good. During the year instead of the usual two days, three days were made compulsory for games during headquarter terms.

Games continued in camps but there, as a rule, they necessarily took a different form. It may be mentioned that in those camps where the ground for recreation is limited, the tug-of-war and the ' weight ' are useful forms of recreation.

Swimming.—Swimming though not in the syllabus is compulsory. There are two camps in which swimming can be practised, viz., Kargudi (for juniors) and Nilambur (for seniors). A prize is awarded by the College Athletic Club for the best swimmer in each division.

Debating society.—A debating society was started during the year. Technical and non-technical subjects are debated, alternately, a meeting being held every Friday evening during headquarter terms.

Essay prizes.—Mr. A. A. F. Minchin, Conservator of Forests, was pleased to offer two prizes for the two best essays for both the divisions, the subject for essay being—

Seniors.—" To prepare an address to small children aged between 8 and 11 at a primary school regarding ' The Utility of Forests '."

Juniors.—" To address a class of young people of secondary school, aged between 14 to 16 on ' The value of Forests in the Country '."

The prize for the seniors was won by student M. Haq; for juniors by student V. N. Sharangapani.

The standard attained was said to be satisfactory.

J. C. WRENCH,
Principal, Madras Forest College, Coimbatore

COIMBATORE,
29*th August* 1931.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

STATEMENT I.—Statement showing revenue and expenditure at the Madras Forest College, Coimbatore, during 1930–31.

Receipts.

Budget head.	Amount.
VIII. Forests—(*e*) Miscellaneous—	RS. A. P.
(2) Forest College	55,243 2 0
(3) Rents	1,195 3 0
Total ...	56,438 5 0
Deduct—Refunds ...	...
Net Revenue ...	56,438 5 0

Expenditure.

8. b. Conservancy and Works.

Maintenance, repair and renewals—Communications and buildings Forest College work	5,378 1 10
Non-voted—Rates and taxes	98 15 6

8. c. Establishment—D. Forest College.

Pay of officers—	
Non-voted	17,087 14 0
Voted	21,957 14 0
Pay of establishment—	
Voted—Permanent	12,719 12 0
Travelling allowances—	
Non-voted (including passage money)	2,126 5 0
Voted	3,774 9 0
Honoraria—Voted	855 0 0
Non-contract contingencies—Non-voted—	
Rates and taxes	19 0 0
Contingencies—Voted—	
Pay of menials	2,186 3 0
Rents	...
Telephone charges	235 0 0
Miscellaneous	4,414 1 0
Grants-in-aid—Recurring—Voted—Miscellaneous ...	400 0 0
Charges payable to Government departments and others.	6,236 7 0
Supplies and services—General—	
Apparatus and materials	4,725 12 0
Books and periodicals	301 1 0
Miscellaneous	2,832 6 0
Total Expenditure ...	85,348 5 4

				RS. A. P.		RS. A. P.
Deduct—						
I. Revenue realized				56,438 5 0		
II. Expenditure on Museum—						
	RS.	A.	P.			
(*a*) Pay of Curator ...	1,663	4	0			
(*b*) Pay of Museum watchers ...	321	13	0			
(*c*) Other expenses at the Museum in connexion with exhibits ...	68	1	6			
	2,053	2	6	2,053 2 6		58,491 7 6
Net cost on account of the College ...						26,856 13 10

Note.—March final figures from Accountant-General have not been received But adjustments received so far have been taken into account.

STATEMENT No. III—Madras Forest College, Coimbatore division—1930-31.

Serial number and name of student.	Circle or State to which attached.
1. Z. Ariel	Central Provinces.
2. G. P. Tiwari	Do.
3. M. I. Khan	Do.
4. J. M. Singh	Do.
5. R. A. Mandke	Bombay.
6. H. P. Sanap	Do.
7. M. A. Naik	Do.
8. V. C. Yellamalli	Do.
9. V. N. Sharangapani	Do.
10. P. M. Taggerse	Do.
11. Moinuddin	Hyderabad.
12. M. Ali Khan	Do.
13. G. Mahomood	Do.
14. T. K. Bhagawant	Indore.
15. B. T. Binewale	Baroda.
16. J. M. Daniel	Bihar and Orissa.
17. A. N. Mahakud	Athmalik.
18. R. C. Parikh	Rajpipla.
19. K. C. Raj	Private.
20. P. S. Rajamany	Do.

COIMBATORE,
27th August 1931.

J. C. WRENCH,
Principal, Madras Forest College, Coimbatore.

DIVISION—ADMINISTRATION REPORT OF THE FOREST UTILIZATION FOR THE YEAR 1930–31.

At the commencement of the year the division continued to hold control of the following timber depots :—

Beypore (Nilambur commercial concern).

Pollachi (Mount Stuart commercial concern).

Olavakkot sawn material depot (Chenat Nair commercial concern).

Kasaragod (South Mangalore division).

Nanjangod (Wynaad division).

The sleeper depot at Pollachi (Valparai Sleeper project).

Up to the end of the year, with the exception of the log depots, the organization and control of the sawn material depots were carried out by the Forest Utilization Officer assisted by Assistant Forest Utilization Officer, both, with headquarters in Madras. The control of all the logs depots was transferred to the districts on 1st December 1930 except Kasaragod log depot which was transferred in June 1930. The Valparai sleeper depot was transferred to the district on 1st April 1931.

The details of the staff in the division at the end of the year are shown under the heading of the Administration.

Operations.—According to the audited figures the turnover of the division for 1930–31 is Rs. 12,43,547 showing a decrease of Rs. 44,781. At the same time the overheads of the division were reduced from 3·62 per cent in 1929–30 to 2·36 per cent in 1930–31.

Due to the transfer of functions between the Forest Utilization Officer and Divisional officers, it is extremely difficult to compare the results with last year's figures as full details are available only for the first eight months of the year. The figures as is to be expected show a considerable fall in revenue realized by sale of sawn timber and a corresponding increase by sale of timber in log.

Considering the slump in world trade which indirectly affects our sales and the political unrest of the last half of the year under review, results must be considered satisfactory.

Details of the total turnover in 1930–31 are given in Statement I.

Beypore depot.—The market opened fairly well, but from June onwards became dull. Negotiations with a private party resulted in the disposal of large stocks of teak, the accumulation

of which gave cause for anxiety, at prices which were not high, but which were better than could have been obtained in auction. These stocks are being utilized for supply of teak to the railways and hence are not being held up against an improved market.

A similar arrangement in respect of Xylia Xylocarpa was made and enabled stocks of this species also to be cleared at favourable rates.

Five auctions were held during the year.

The timber dealings during the year up to the end of November 1930 for logs, and for the whole year for scantlings are given in Statement II.

Pollachi depot.—Auction sales of logs were held monthly during the year. The receipts of logs (including opening stocks) were 82,741 cubic feet and the disposals were 67,191 cubic feet. The sales were fairly attended during the early part of the year, but there was a tendency for a combine in some of the sales during the latter part of the year. A decline in attendance was noticed and it was proposed to suspend auctions for a short time till an improvement in the condition is seen. Prices for teak were unsteady and the junglewood species showed a decided falling tendency.

The market for spokes and felloes was dull and the experiment to find a market for Pollachi spokes and felloes in Guntur was not a success.

The transactions in sawn timber were small as no new stocks came forward consequent on the closure of mills.

The stock of sawn timber on 1st April 1930 was 9,900 cubic feet, receipts 497 cubic feet, and the disposals were 5,707 cubic feet.

Details of receipts and disposals are given in Statement III.

Kasaragod depot.—The balance of log stocks at the beginning of the year was 5,065 cubic feet, receipts being 49 cubic feet, the disposals were 5,114 cubic feet. The receipts including opening stock of sawn materials were 56,013 cubic feet, the disposals were 33,979 cubic feet.

Details of receipts and disposals are given in Statement IV.

Nanjangod depot.—The receipts including opening stock of logs up to end of November 1930 were 26,271 cubic feet, the disposals were 9,218 cubic feet. The prices realized are fair considering the present depressed condition of the timber market. Auctions were not very well attended and sales were made by private treaty at fair rates. Total receipts of scantlings including opening stock were 28,126 cubic feet and the disposals were 18,679 cubic feet.

Details of receipts and disposals are given in Statement V.

Olavakkot depot.—As the mill closed in November 1929 and practically all stock in hand was sold, disposals during the year were very small. Steps have since been taken to clear the balance.

Other operations.—Statement VI shows the details of the number of sleepers actually despatched to the railways during 1930–31 and the amounts realized. The railways agreed to accept from the Forest department 35,000 broad gauges and 50,000 metre gauges. Of these 34,650 broad gauges and 48,950 metre gauges were *passed* within 31st March 1931. 32,912 broad gauges and 46,853 metre gauges were despatched before 31st March 1931 and the balance during April 1931. Besides 2,600 narrow gauge sleepers were also passed and supplied within 31st March 1931. All the above sleepers were passed by the Forest Utilization Officer and the Assistant Forest Utilization Officer.

Inspection of depots and auction sales.—The Forest Utilization Officer and Assistant Forest Utilization Officer toured continually throughout the year passing sleepers, holding monthly auctions, inspecting the depots and interviewing merchants, 210 days being spent on tour.

All the depots were inspected at regular intervals throughout the year and stock taking at the end of the year was made by the Assistant Forest Utilization Officer and Forest Utilization Officer.

Overseas trade.—The small outstanding with Messrs. W. W. Howard Bros. & Co., London, was accounted for by the High Commissioner for India, London, who was auditing their accounts and the amount was duly credited to the respective divisions.

The positions of consignment sales are shown in Statement VII. Except a few consignments during the early part of the year already earmarked during the previous year, export of logs on consignment sale was stopped considering the trade slump all over the world. Some efforts were made to interest the American markets by sending samples of hardwoods suitable for veneer tests.

Renewed efforts were being made to interest the Jail department and the Public Works Department to indent upon the Forest department direct for their requirements in logs and the jails at Coimbatore, Trichinopoly and Cannanore purchased from the department 3,436 cubic feet of teak logs to the value of Rs. 9,761 during 1930–31. Further, Messrs. Binny & Co. were supplied with 6,936 cubic feet teak valued at Rs. 25,741 and other junglewood logs of 932 cubic feet (Adina and Grewia tilæfolia) valued at Rs. 1,977-8-0.

Professional advice regarding suitable woods for industrial and other purposes was freely given by the Forest Utilization Officer to many enquiries received in the office.

Consequent on the refusal of Messrs. T. Namberumal Chetti & Sons to sign the agreement for the sale of sawn timber in January 1931 the disposal of the sawn stock existing in the depots engaged the special attention of the Forest Utilization Officer and tenders were called for the purchase of sawn timber. No satisfactory tenders were received and later in the year, the department introduced a reduced price list with fairly satisfactory results.

Special measures were adopted consequent on the unsatisfactory economic conditions prevailing.

In consultation with higher authority the policy now being followed is to restrict production and to hold present stocks unless reasonable prices are realized. By doing so we prevent private speculation which is dangerous to every one connected with the timber trade. It is realized that a certain risk of degrade is involved especially with junglewood species, but taking a broad view, it is better for the risk to be shouldered by Government rather than that merchants should be encouraged to speculate on very doubtful conditions and against a future impossible to forecast, a procedure which would inevitably result in a period of instability in the timber market. Our aim is as far as possible to keep the balance between production and consumption.

This policy may be open to criticism by vested interests who have hitherto been in a position to regulate the market to a certain extent and have actually done so. They naturally object to losing the measure of control hitherto enjoyed.

I consider that this report is the opportunity of making clear to the public that at the moment Government are the only producers in quantity of teak in the Presidency since supplies from private forests are almost exhausted. They can accordingly control the teak market. As the price of junglewoods varies with the price of teak they will therefore be in a position to influence the whole market should it be necessary.

Financial.—The turnover of the division during the year was Rs. 12,43,547 and the figures for the division since its inception are given below :—

	LAKHS. RS.
1925-26	3½
1926-27	9¼
1927-28	12¼
1928-29	13¼
1929-30	12¾

Forest economy.—The following periodicals were received and circulated to all the officers of the department:—

Timberman.	Indian Trade Journal.
Hardwood Record.	Indian Forester.
Timber Trades Journal.	

Ledger filing.—Important articles from journals, etc., are being ledger filed regularly.

Liaison between the Forest Economist, Dehra Dun, and the Forest Utilization Officer.—Closest co-operation between the Forest Research Institute, Dehra Dun, and the Forest Utilization Officer was maintained, as usual, in the matter of supplies of timber for various tests carried out in Dehra Dun. The supply of timbers for the various projects made during 1930–31 are given below:—

Project I.

Division.	Species.	Quantity.	
		NOS.	CUBIC FEET.
North Mangalore	Canarium strictum ...	5	95
	Lophopetallum wightianum	5	76
	Machillus macrantha ...	5	112
	Myristica attenuata ...	5	70
South Coimbatore	Mimusops Elengi ...	5	134
	Stereospermum xylocarpum	5	

Gironn, reticulata, Sterculia alata and Calophyllum Inophyllum were not supplied as they are not available.

Project II.

		NOS.	CUBIC FEET.
North Mangalore	Canarium strictum ...	5	164
	Machillus macrantha.	5	178

Project IV.

North Mangalore—Pœciloneuron indicum ...	200 broad gauge sleepers.
Ganjam—Bursera serrata	70 broad guage sleepers.

The full number of Bursera serrata sleepers required for the Project IV test was not supplied as the District Forest Officer, Ganjam, since reported that they were not available in commercial quantities and it was dropped.

Project VII.

	NOS.	CUBIC FEET.
North Mangalore—Machillus macrantha ...	17	502
Nilambur—Terminalia paniculata	16	399

Project VIII.

Besides Calophyllum wightianum, Bischofia javanica, Dichopsis elliptica, Swetenia Mahogani supplied for the above tests during the previous year, for which preliminary reports were received during the year, arrangements were made for the supply of the following species to be tested under this project :—

Calophyllum tomentosum.	Machillus macrantha.
Terminalia paniculata.	Hopea parviflora.
Eugenia gardneri	Vateria Indica.
Terminalia belerica.	Eleocarpus tuberculatus.

The supplies of the above timbers were completed only during June 1931.

Other experiments.—Sapwood sleepers of Calophyllum tomen tosum, Calophyllum wightianum, Hopea parviflora, Lagerstrœmia lanceolata and Xylia xylocarpa were arranged to be supplied for special experiment to collect data with reference to the treatment of sapwood of these species.

Four logs of Pœciloneuron indicum were also supplied during March 1931 for experimental test for golf shafts and fishing rods.

White-ant test with regard to Terminalia arjuna is also being arranged.

Enquiries for authentic wood specimens of certain species required by the Forest Research Institute, Dehra Dun, were also arranged to be supplied.

Five tons of Ochlandra travancorica (Eta bamboos) were arranged to be supplied from Tinnevelly to the Forest Research Institute, Dehra Dun, in connexion with experiment on paper manufacture.

Market report.—The report on markets prepared by Mr. J. A. Master was printed and received and the report is being made up to date as far as possible by adding useful information.

Liaison with the Timber Adviser to the High Commissioner for India, London.—Sample woods for turnery work were supplied to the Empire Marketting Board, London, of the following species :—

Hardwickia binata from North Salem.
Diospyros melanoxylon from Kurnool West.
Hardwickia pinnata from South Mangalore.

An attempt was made to interest the British Railways in tropical hardwood railway keys. The matter is still under consideration.

Mahagony logs from Nilambur were sent for trials in cabinet work in the Forest Products Research Laboratory, Bucks, England.

Minor Forest Products.—Mr. M. A. Hafiz was in charge of this section till 30th September 1930 when he went on leave; the Forest Utilization Officer took over this part of the work from him from 1st October 1930.

Enquiries received from firms and individuals, local and foreign, were dealt with as usual.

Minor forest produce samples for the Commercial Samples Room, India House, London, are being supplied through the Forest Economist, Dehra Dun.

The monthly minor forest produce price list continued to be circulated to Conservators and District Forest Officers.

The market was unsteady and dull during the year. The increase in imports of wattle bark at cheap rates and the depression in the tanned hides market adversely affected the sale of local tan barks.

Yellow ochre.—Attempts were made to introduce in the market the mineral ' Yellow ochre ' found in the North Cuddapah division. Samples however were not up to the standard required by the firms dealing in this produce.

Hopea parviflora bark.—Attempts were made to renew the demand for this tan stuff but without success. There is little likelihood of this bark being able to oust existing tanning materials now obtainable at very low rates.

Cassia fistula.—The investigation into the tanning content of konnai bark of various ages continued. Results will be issued in due course in a pamphlet.

Cassia auriculata.—The experiments to carry out the systematic examination of this valuable tan bark from seedling plants and coppice shoots of varying ages and growing on different soils were continued by the respective District Forest Officers in the three districts of Anantapur, Vizagapatam and Nellore. No results can be expected for some time, as the establishment of the necessary series of plots will take five years. The experiment at Pecheruvu (Kurnool West district) was dropped.

Anogeissus latifolia leaves and sumac.—Owing to the difficulty and expense of shade drying large quantities of leaves, the result of which was very favourably reported on, investigation into the tannin content of leaves dried in the sun—a much cheaper method—was carried out by the Imperial Institute with samples supplied by District Forest Officer, Madura.

A. Pale green tender leaves, sun-dried.

B. Large green but tender leaves, sun-dried.

C. Young leaves and twigs mostly broken.

The comparison of the results of examination of the samples of sun-dried and shade-dried leaves received from the Imperial Institute, London, are given below :—

—	Present leaves (sun-dried).			Previous samples (shade-dried).		
	A. Small leaves.	B. Large leaves.	C. Dhawa sumac (young leaves and stalks).	A. Small leaves.	B. Large leaves.	C. Dhawa sumac (young leaves and stalks).
	PER CENT.	PER CENT.	PER CENT.	PER CENT.	PER CENT.	PER CENT.
Moisture	18·8	11·5	12·7	12.8	12·3	14·0
Insoluble matter ..	42·9	53·9	37·0	44·3	44·5	33·7
Extractive matter (non-tans).	17·1	15·1	15·2	10·0	11·0	13·8
Tannin	28·2	19·5	35·1	32·9	32·2	38·5
Ash	3·7	4·6	4·0	4·4	3·9	4·0

The results of analysis showed that in every case the tannin content of sun-dried leaves was less than that of shade-dried leaves.

Collection of information.—Literature on minor forest products continued to be recorded in the connected ledger files.

Lac.—The policy of introducing lac in suitable areas was under supervision of the Deputy Forest Utilization Officer until October. On his transfer consequent on the abolition of the post, Mr. Hafiz continued to handle this work under the Conservator of Forests, V Circle. A consolidated report on work done is given below :—

Lac Operations.

General.—Wherever lac hosts occur in fairly large numbers, they can be utilized to cultivate lac provided the climatic conditions of those localities are suitable for introducing the cultivation of lac. Lac operations being new and labour and the subordinates quite ignorant of them, it was decided that before embarking on regular schemes of lac cultivation some experimental crops should be raised to test the climatic conditions of those localities and to know definitely whether lac can grow there throughout the year, and also to train up the local staff and labour in the various operations connected with lac work. Waste of money and energy could thus be avoided if the limits and the optimum conditions of each locality are first definitely ascertained.

2. During the year lac experiments were carried out in Central Salem, North Coimbatore, Madura and Palghat divisions.

Central Salem.—Experimental cultivation of lac on *Shorea talura* was carried out at Chitteris on the plateau. Three crops were raised—the pre-monsoon crop from April to July 1930, the monsoon crop from August to December 1930, and the post-monsoon crop from January to April 1931. The monsoon crop yielded the richest harvest—nearly six times the seed used.

These experiments have demonstrated the suitability of the Chitteri plateau for the production of lac, and that the local Malayalees can be trained up in lac operations to carry on the cultivation of lac as a village industry, as in parts of Bihar and Central Provinces. *Shorea talura, Schleichera trijuga* and other lac hosts can be successfully utilized to produce lac. In view, however, of the present low price for lac, it was decided that no further developments in the Chitteris should be made until the market for lac shows a decided improvement.

North Coimbatore.—(*a*) The cultivation of lac on *Shorea talura* was started at Onnaithittu and Mavanatham. In the absence of pruned trees it was decided to infect unpruned shoots which looked suitable. This was done chiefly to avoid delay as *Shorea talura* should generally be pruned two years before infecting it with lac.

Two crops were raised during the year. The monsoon crop, which was started in July 1930, matured only in January 1931. It took 5½ months (a month longer than at Chitteri) to mature. The post-monsoon crop, however, took only 3½ months—January to April 1931.

There was heavy mortality in the first month after infection due to the unsuitability of many infected shoots, which was not unexpected, but the crop on several branches developed fairly well in both the localities. The yield was about the seed used. The yield though small was sufficient to show that lac can grow there from July to April.

(*b*) Kusum (*Schleichera trijuga*) brood lac obtained from Muri (Bihar) was put on pruned *Butea frondosa* and *Zizyphus jujuba* trees at Hassanur in July 1930. The crop on almost all the *Zizyphus* trees developed successfully but on *Butea* shoots, the bark of which had since infection become corky, the lac insects died by September. The crop was harvested in January 1931 and the yield from the *Zizyphus* trees was more than thrice the seeds used. The encrustation on most of the shoots was quite thick and continuous.

Madura.—At Vannathiparai in Madura district, *Schleichera trijuga* trees were infected. For want of pruned trees, suitable unpruned shoots were inoculated in order to avoid delay in starting the experiments.

Two crops were tried with the Kusum brood lac imported from Bihar. The crops developed well in the beginning but the heavy unusual rains in February 1930 caused so great a havoc to the first crop that the settlement disappeared almost completely from most of the shoots. The second crop had been subject to severe attack by numerous predators of lac. Shoots which escaped predator attack developed thick encrustation over their full length, which have served as a good sample of the size of the lac encrustation the crop can produce in this locality.

Pruning of host trees.—It can be said, on the experience so far gained, that success or failure of lac cultivation depends to much greater extent on careful and timely pruning of lac hosts than it is generally believed. Observations made so far show that *Butea frondosa* should be pruned late in April for July infection. *Zizyphus jujuba* responds successfully to pruning done early in April for July infection and in the beginning of July for October infection. *Schleichera trijuga* trees are to be pruned in the beginning of February before the leaves turn yellow and are shed.

In Palghat division, some *Schleichera trijuga* trees in Kottanikunnu reserve were pruned in February 1931. Over a thousand *Shorea talura* trees were pruned in North Coimbatore, and about 5,000 poles on the Chitteri plateau in Central Salem division. In Madura nearly a hundred *Schleichera* trees were lopped.

Administration.

Forest Utilization Officer ...	Mr. H. P. Ward from 1st April to the end of the year.
Assistant Forest Utilization Officer.	Mr. V. S. Kuppuswami from 1st April 1930 to 3rd February 1931.
	Mr. J. A. Wilson from 4th February 1931 to the end of the year.
Deputy Forest Utilization Officer.	Mr. Muhammad Abdul Hafiz from 1st April to 30th September 1930. (The separate post by Deputy Forest Utilization Officer was abolished from 1st October 1930.)

Field Staff.

One special duty ranger, Calicut.

Two depot rangers at Pollachi and Beypore.

One forester in each of the depots, Beypore, Pollachi, Nanjangud and Kasaragod.

Depot clerks (permanent and temporary)—Pollachi 1 (permanent), Beypore (temporary) 1.

Watchers—Beypore 3, Pollachi 2, Kasaragod 2, Nanjangud 1.

Peons—Beypore 1 (temporary), Calicut 1 (temporary).

Headquarters Staff.

One tour-clerk.

One accountant.

Two clerks.

One clerk-typist.

Five peons.

STATEMENT I.—Statement of turnover of the Forest Utilization Division for 1930–31.

Depot.	Logs.	Scantlings and rejected scantlings.	Sleepers and rejections.	Spokes and felloes, Bamboos and Miscellaneous.	Consignment sales.	Total.
	RS.	RS.	RS.	RS.	RS.	RS.
Beypore	1,77,878	21,480	..	3,660	1,877	2,04,895
Pollachi	90,628	10,271	..	811	319	1,02,029
Olavakkot	..	180	..	5	..	185
Kasaragod	3,894	46,880	* 27,544	79	..	78,397
Wynaad division including Nanjangud and Mysore	34,166	47,242	..	..	14,811	96,219
Valparai project ..	..	340	† 1,14,386	..	..	1,14,726
Beypore tope	..	..	..	2,693	..	2,693
Total ..	3,06,566	1,26,393	1,41,930	7,248	17,007	‡5,99,144

		RS.
Details—		
* Sale to Railways		26,852
Sale of rejections		1,280
		28,132
Less adjustment		588
		27,544
† Sleepers to Railways		1,12,104
Rejections		2,398
		1,14,502
Less adjustments		116
		1,14,386

Value of sleepers passed on behalf of districts for purposes of turnover only—

	RS.	RS.
Nilambur	69,978	
Kallai	42,281	
Wynaad	36,298	
North Mangalore	27,362	
South Mangalore	4,709	
Palghat	1,58,357	
Tinnevelly	2,510	
		3,41,495
Log sales conducted after 1st December 1930—		
Nilambur-Beypore Depot	1,48,881	
South Coimbatore-Pollachi	39,275	
Wynaad-Mysore	68,192	
Nanjangud	46,560	
		3,02,908
		6,44,403
‡ *Add*		5,99,144
		12,43,547

Statement II.—Beypore Depot—Receipts and disposals for 1930-31.

Species.	Opening stock.	Receipts.	Total.	Disposal.		Closing stock.	Sale amount.	Average rate per cubic foot.
				Sales.	Other disposals.			
Logs.	C.FT.	C.FT.	C.FT.	C.FT	C.FT.	C.FT.	RS.	RS. A. P
Teak	32,815	110,058	142,873	49,949	9	92,915	83,813	1 10 9
Pillamarudu	39,957	108,468	148,425	35,119	4,861	108,445	29,058	0 13 3
Karimarudu	..	8,606	8,606	1,316	..	7,290	987	0 12 0
Venteak	..	18,064	18,064	5,302	..	12,762	5,037	0 15 2
Irul	26,029	7,867	33,896	26,016	266	7,614	24,772	0 15 3
Rosewood	57	344	401	57	..	344	65	1 2 3
Mahogany	..	1,255	1,255	..	..	1,255	..	..
Natural teak	4,314	5,365	9,679	4,309	5	5,365	8,380	1 10 6
Vengai	..	678	678	..	..	678	..	..
Thavala	..	1,850	1,850	..	84	1,766	..	..
Cheeni	..	1,055	1,055	..	725	330	..	..
Palai	..	147	147	..	..	147	..	..
Puduvanni	..	48	48	..	..	48	..	..
Kanakaidu	..	13	13	..	..	13	..	..
	103,172	263,818	3,66,990	1,22,068	5,950	238,972	1,52,112	
Poles and measurables—Nos.	1,762	11,390	13,152	6,326	3	6,823	25,629	
				Add adjustments of last year's sale ..			137	
							1,77,878	
Sawn Timbers.								
Teak	6,386	535	6,921	2,676	8	4,164	8,276	3 1 0
				* 73			15	* Rejections.
Group I	16,960	3,332	20,292	6,863	147	11,418	12,461	1 13 1
				* 1,864			376	
Total ..	23,346	3,867	27,213	11,476	155	15,582	21,128	..

	RS.
By sale of rejections and porotes	105
Saw dust	27
Teak pieces	251
	21,511
Deduct adjustment of previous year's sale	31
	21,480

	RS.
Add by sale of logs, poles and measurables	1,77,878
Do. bamboos and karias	3,660
Add amount realized by overseas consignments sales	1,877
	2,04,895

Statement III.—Pollachi Depot—Receipts and disposals for 1930-31.

Species.	Opening stock.	Receipts from		Total.	Disposal.		Closing stock.	Sale amount.	Rate.
		District Forest Officer, South Coimbatore.	Others.		Sales.	Others.			
	C.FT.	C.FT.	C.FT.	C.FT.	C.FT.	C.FT.	C.FT.	RS.	RS. A. P.
Teak	6,426	21,606	820	28,852	21,790 * 324	980	5,758	51,137	2 5 9
Pillamarudu	1,485	6,661	504	8,650	7,656	187	807	7,973	1 0 8
Karimarudu	4,692	7,326	1,297	13,315	8,205 * 24	315	4,771	6,823	0 13 4
Venteak	1,649	10,368	272	12,289	10,571	139	1,579	9,626	0 14 7
Vengai	3,334	2,910	7	6,251	5,537	157	557	5,443	0 15 9
Manjakadambai	907	1,647	146	2,700	1,731 * 24	..	945	1,754	1 0 3
Thadasu	458	4,249	— 6	4,701	4,578 * 20	..	103	3,813	0 13 4
Rosewood	1,526	3,042	251	4,819	3,789	..	1,030	7,235	1 14 7
Vêdankarnai	151	355	..	506	443	63	..	513	1 2 6
Miscellaneous species	204	452	2	658	482 * 6	170	..	333	0 11 1
	20,832	58,616	3,293	82,741	65,180	2,011	15,550	94,650	..
Teak poles	..	400	..	400	400	..	..	88	0 3 6 each.
	* Revenue realized by sale of cut ends, rejections, etc.							480	
								95,218	
	Deduct adjustment mostly due to resales of timber							4,590	
								90,628	

STATEMENT III.—Pollachi Depot—Receipts and disposals for 1930-31—*cont.*

Species.	Opening stock.	Receipts from		Total.	Disposals.		Closing stock.	Sale amount.	Rate.
		District Forest Officer, South Coimbatore.	Others.		Sales.	Others.			
	NOS.	NOS.		NOS.	NOS.	NOS.	NOS.	RS.	RS. A. P.
Teak spokes	7,780	3,240	..	11,020	1,104	..	9,916	811	17 10 1
,, felloes	3,893	1,620	..	5,513	552	..	4,961		a set
Vengai spokes	707	519	..	1,226	..	744	482	..	..
,, felloes	354	262	..	616	..	372	244	..	..
Total ..	12,734	5,641	..	18,375	1,656	1,116	15,603	811	..
Sawn timber—	C.FT.	C.FT.		C.FT.	C.FT.		C.FT.		
Teak	2,870	14	..	2,884	1,933	..	951	5,554	2 13 6
Other species	7,030	483	..	7,513	3,774	..	3,739	5,455	1 7 1
Total ..	9,900	497	..	10,397	5,707	..	4,690	11,009	..
Add value of missing scantlings recovered from carting contractor ..								7	
								11,016	
Less adjustments in previous year's sale								745	
								10,271	
Add by sale of logs, poles, etc.								90,628	
,, ,, spokes and felloes								811	
,, ,, sale of overseas consignment								319	
								1,02,029	

STATEMENT III (*a*).—Valparai Sleeper Depot—Receipts and disposals for 1930-31.

Species.	Opening stock.	Receipts.	Total.	Disposal.		Closing stock.	Sale amount.	Average rate.
				Sales.	Others.			
	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	RS.	RS. A. P
Mesua broad gauge sleepers ..	3,843	12,641	16,484	12,469 I Class 197 II ,, 1,174 Rejections.	6	2,638	1,02,869 1,083 2,286	8 4 0 5 8 0 1 15 4
Mesua metre gauge sleepers ..	28	4,916	4,944	2,717 I Class. 130 Rejections.	..	2,097	8,151 112	3 0 0 0 13 9
White cedar scantlings.. ..	170 cubic feet.	..	170 cubic feet.	170 cubic feet.	..	..	340	2 0 0
							1,14,841	
				Less adjustments, etc., of previous year's sales ..			115	(Value of defective sleepers deducted by Railways).
							1,14,726	

Statement IV.—Kasaragod depot—Receipts and disposals for 1930-31.

Species.	Opening stock.	Receipts		Total.	Disposal.		Closing stock.	Sale amount.	Rate.
		South Mangalore Division.	Others.		Sales.	Others.			
	C.FT.	C.FT.		C.FT.	C.FT.			RS.	RS. A. P.
Logs—									
Pillamaradu	1,084	..	..	1,084	1,084	..	..	576	0 8 6
Rosewood	214	8	..	222	222	..	..	167	0 12 0
Other species	191	41	..	232	232	..	..	131	0 9 1
Teak poles	3,576	..	..	3,576	3,576	..	..	3,020	0 13 6
Total	5,065	49	..	5,114	5,114	..	..	3,894	..
	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	RS.	RS. A. P.
Mill sawn sleepers—									
Xylia B.G.	..	..	38	38	35	..	3	79	2 4 4
Do. M.G.	..	..	112	112	82	..	30	91	1 2 0
Hand sawn Rejections B.G.	128	..	..	128	..	..	128	..	..
Do. M.G.	103	..	..	103	..	..	103	..	..
Eugenia gardneri B.G.	10	..	..	10	6	..	4	15	2 8 0
Do. M.G.	10	..	..	10	7	..	3	7	1 0 0
Hopea sleepers B.G.	254	2,414	..	2,668	2,223	16	148	18,340	8 4 0
					281			762	2 11 5
Do. M.G.	73	527	16	616	500	..	39	1,500	3 0 0
					77			106	1 6 0
Xylia sleepers B.G.	92	50	..	142	44	..	15	352	8 0 0
Do. B.G. Rejections					83			191	2 4 10
Do. M.G. Rejections	21	2,868	..	2,889	2,220	..	642	6,660	3 0 0
					27			29	1 1 2
	..	..	..	..	..	..	..	28,132	..
					Less adjustments	..		588	(Value of sleepers rejected by railways.)
								27,544	

Kasaragod depot—Receipts and disposals for 1930-31—*cont.*

Species.	Opening stock.	Receipts.		Total.	Disposal.		Closing stock.	Sale amount.	Rate.
		South Mangalore Division.	Others.		Sales.	Others.			
Mill sawn timber—	C.FT.	C.FT.		C.FT.	C.FT.	C.FT.	C.FT.	RS.	RS. A. P.
Teak	11,363	165	..	11,528	6,923	..	4,605	18,074	2 13 9
Other species	33,935	..	..	33,935	21,159	2	12,774	21,363	1 0 2
Hand sawn—									
Kolemarams, Chattams and other species.	4,669	5,881	..	10,550	5,879	16	4,655	7,583	1 5 6
Total ..	* 49,967	6,046	..	56,013	33,961	18	22,034	47,020	..
							Less Adjustments on account of previous year's sale ..		140
									46,880
							Add by sale of logs and poles ..		3,894
							„ supply of sleepers ..		27,644
							Add recovery of interest and dem urrage ..		79
									78,397

* The difference in opening balance is due to revised reconciliations made in August 1931.

STATEMENT V.—Nanjangod depot—Receipts and disposals, 1930-31.

Species.	Opening stock.	Receipts from		Total.	Disposals.		Closing stock.	Sale amount.	Average rate.
		Divisions.	Others.		Sales.	Others.			
Logs—	C.FT.	C.FT.	C.FT.	C FT.	C.FT	C.FT.	C.FT.	RS.	RS. A. P.
Teak	3,543	16,119	2,034	21,696	8,453	4	13,239	25,652	3 0 6
Vengai	..	2,479	..	2,479	673	..	1,806	1,328	1 15 7
Rosewood	..	2,096	..	2,096	88	..	2,008	58	0 10 7
Total ..	3,543	20,694	2,034	26,271	9,214	4	17,053	27,038	..
Less adjustment on account of previous year ..								6,080	(due to cancellation of sales, etc.).
								20,958	
Sawn timber—									
Teak	12,606	3,198	128	15,932	12,021	..	3,911	37,631	3 2 1
Other species	9,974	2,220	..	12,194	6,658	..	5,536	9,731	1 7 4
Total ..	22,580	5,418	128	28,126	18,679	..	9,447	47,362	..
Less adjustment on account of previous year's sales ..								120	
								47,242	
Logs ..								20,958	
Scantlings ..								47,242	
Add revenue from sale of 3,302 c.ft. of logs from Mysore Depot ..								13,208	
								81,408	
Add overseas consignment sales ..								14,811	
								96,219	

STATEMENT V-A.—Olavakkot—Receipts and disposals of sawn timber for 1930-31.

Species.	Opening stock.	Receipts.	Total.	Disposal		Closing stock.	Sale amount.	Average rate.
				Sales.	Others.			
	C.FT.	C.FT.	C.FT.	C.FT.	C.FT.	C.FT.	RS.	RS. A. P.
Other species	1,344	212	1,556	212	Nil.	1,344	180	0 13 7
Total ..	1,344	212	1,556	212	Nil	1,344	180	..
Revenue realized by sale of a rocking chair ..							5	
							185	

STATEMENT VI.—Statement showing sleepers despatched in 1930–31 to the Railway.

Division. (1)	Species. (2)	Broad gauge I Class.			Broad gauge II Class.		
		Number. (3)	Rate. (4)	Value. (5)	Number. (6)	Rate. (7)	Value. (8)
			Rs. A.	Rs. A.		Rs. A.	Rs. A.
Nilambur	Xylia	3,422	8 0	27,376 0	8	5 5	42 8
	Teak	12	9 8	114 0	..	..	..
	Hopea	76	8 4	627 0	..	..	..
	Mesua	299	8 4	2,466 12	..	..	..
	Total ..	3,809	..	30,583 12	8	..	42 8
Wynaad	Mesua	1,237	8 4	10,205 4	25	5 8	137 8
	Mesua	1,998	8 4	16,483 8	..	..	..
	Total ..	3,235	..	26,688 12	25	..	137 8
Palghat division ..	Mesua	12,988	8 4	1,07,151 0	87	5 8	478 8
Olavakkot and ..	Hopea	8	8 4	66 0	..	..	..
Melattur	Irul	306	8 0	2,448 0	6	5 5	31 14
	Total ..	13,302	..	1,09,665 0	93	..	510 6
North Mangalore ..	Irul	250	8 0	2,000 0	..	..	..
	Hopea	1,143	8 4	9,429 12	2	5 8	11 0
	Total ..	1,393	..	11,429 12	2	..	11 0
South Mangalore ..	Irul	25	8 0	200 0	..	..	..
Tinnevelly	Mesua	249	8 4	2,054 4	..	..	..
Kasaragod	Hopea	2,223	8 4	18,339 12	..	..	..
	Irul	44	8 0	352 0	..	..	..
	Total ..	2,267	..	18,691 12	..	..	..
Valparai	Mesua	12,469	8 4	1,02,869 4	197	5 8	1,083 8
Kallai	Irul	3,428	8 0	27,424 0	27	5 5	143 7
	Grand Total ..	40,177	..	3,29,606 8	352	..	1,928 5

STATEMENT VI.—Statement showing sleepers despatched in 1930-31 to the Railway—*cont.*

Division.	Species.	Metre gauge I Class.			Metre gauge II Class.			Narrow gauge sleepers.			Total value.
		Number. (9)	Rate. (10)	Value. (11)	Number. (12)	Rate (13)	Value. (14)	Number. (15)	Rate. (16)	Value. (17)	(18)
			RS.	RS.		RS. A.	RS. A.		RS.	RS.	RS. A.
Nilambur	Xylia	11,995	3	35,985	36	2 0	72 0	..	..	..	..
	Teak	735	4	2,940	7	2 11	18 13	..	..	..	..
	Hopea	19	3	57	..	..	..	..	..	..	..
	Mesua	93	8	279	..	..	..	..	..	..	..
	Total ..	12,842	..	39,261	43	..	90 13	..	..	..	69,978 1
Wynaad	Mesua	398	3	1,194	5	2 0	10 0	..	..	..	..
	Mesua	2,756	3	8,268	..	..	..	..		..	..
	Total ..	3,154	..	9,462	5	..	10 0	..	..	..	36,298 4
Palghat division ..	Mesua	14,789	3	44,367	19	2 0	38 0	..	..	..	..
Olavakkot and ..	Hopea	6	3	18	..	..	..	..	..	..	..
Melattur	Irul	1,253	3	3,759	..	..	..	..	..	..	..
	Total ..	16,048	..	48,144	19	..	38 0	..	..	..	1,58,357 6
North Mangalore ..	Irul	260	3	780	..	..	..	..	..	..	..
	Hopea	5,047	3	15,141	..	..	..	..	..	..	..
	Total ..	5,307	..	15,921	..	..	..	..	..	..	27,361 12
South Mangalore ..	Irul	1,503	3	4,509	..	..	..	..	..	..	4,709 0
Tinnevelly	Mesua	152	3	456	..	..		..	..	..	2,510 4
Kasaragod	Hopea	500	3	1,500	..	..	..	..	..	..	..
	Irul	2,220	3	6,660	..	..	..	..	..	..	..
	Total ..	2,720	..	8,160	..	..	..	..	..	..	26,851 12
Valparai	Mesua	2,717	3	8,151	..	..	..	..	..	..	1,12,103 12
Kallai	Irul	3,170	3	9,510	2	2 0	4 0	2,600	2	5,200	42,281 7
	Grand Total ..	47,613	..	1,43,574	69	..	142 13	2,600	..	5,200	4,80,451 10

STATEMENT VII.—Consignment sales through Messrs. Peirce Leslie & Co. for 1930–31.

Division.	Species.	Stock on 1st April 1930.	Despatches in 1930–31.	Total quantity.	Sales in 1930–31. Quantity.	Sales in 1930–31. Gross sale-proceeds as per account sales.	Expenses including Forest Utilization Officer's overheads.	Net proceeds.	Average rate per cubic foot on the gross proceeds.	Average rate per cubic foot on the net proceeds.	Stock on 31st March 1931.	
		C.FT.	C.FT.	C.FT.	C.FT.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	C.FT.	
1. Wynaad ..	Laurel ..	1,479	3,109	4,588	1,831	4,934 15 1	3,033 8 7	1,901 6 6	2 11 1	1 0 7	2,757	
	Rosewood ..	239	202	441	355	1,350 10 5	430 0 9	920 9 8	3 12 10	2 9 6	86	
2. Nilambur ..	Laurel ..	..	778	778	778	1,337 3 1	1,563 0 7	—225 13 6	1 11 6	— 0 4 8	..	
	Haldu ..	118	..	118	118	—133 5 9	128 2 1	—261 7 10	—1 2 1	— 2 3 5	..	
3. South Coimbatore.	Samples of miscellaneous species supplied free of cost.	..	264	264	264	* 319 0 0	594 6 7	—275 6 7	..	..	..	
4. Nilgiris ..	Rosewood ..	674	..	674	..	..	..	..	..	..	674	
	Total ..	2,510	4,353	6,863	3,346	7,808 6 10	5,749 2 7	2,059 4 3	..	..	3,517	
	Direct Oversea consignment sales.											
Wynaad ..	Laurel ..	1,501	428	1,929	1,929	8,246	1,312 0 3	6,933 15 9	4 4 5	3 9 6	†	
Nilambur ..	Rosewood ..	40	..	40	40	280	28 4 0	251 12 0	7 0 0	6 4 8		
	Pillamaradu ..	..	135	135	135	540	66 7 1	473 8 11	4 0 0	3 8 1		
	Total ..	1,541	563	2,104	2,104	9,066	1,406 11 4	7,659 4 8	..	..		

* Represents recovery of expenditure

† Sold to Messrs. Acme Veneer and Lumber Co. and Wood Mosaic & Co., United States of America and Mallinson & Sons, London.

MADRAS,
26th August 1931.

J. A. WILSON,
Forest Utilization Officer.

ADMINISTRATION REPORT—1930-31—FOREST ENGINEERING DIVISION, MADRAS.

The charge of the division was held by the following officers:—

(1) E. S. Dawson, Esq., I.F.E.S., from 1st April 1930 to 5th June 1930 and from 8th January 1931 to 31st March 1931.

(2) J. A. Wilson, Esq., I.F.S., from 5th June 1930 afternoon to 7th January 1931.

2. *Chenat Nair Exploitation.*—The concern was under liquidation and all extraction activities were stopped from 1st April 1930.

The transactions of the concern were financed by this division from the ordinary budget heads up to October 1930 and later on adjusted to the personal ledger account of the concern.

The sleepers which were in stock at the close of the previous year were disposed of during the year and Rs. 9,600 was realized.

Book debts amounting to about Rs. 1,19,250 were also realized during the year.

3. *Communications and Buildings.*—The permanent and temporary roads and buildings with the exception of the mill buildings were transferred to the Palghat division at the following value resulting in a loss of Rs. 35,694-15-2.

Details.	Book value.	Value at which transferred.	Loss on transfer.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Permanent roads	12,006 7 4	..	12,006 7 4
Extraction roads	26,374 7 10	2,286 0 0	24,088 7 10
Saw Mill buildings—			
Fitters' quarters I and II	3,735 15 0	3,735 15 0	..
Temporary buildings at Olavakkot	3,029 0 0	3,029 0 0	..
Rest-house at Palamalai and pipe line and furniture.	3,854 0 0	3,854 0 0	..
Olavakkot depot shed and Dhoni motor shed.	..	400 0 0	400 0 0
Total ..	48,999 14 2	13,304 15 0	35,694 15 2

The value of the above buildings and roads have been adjusted in 1931-32 accounts.

The Assistant Director of Commercial Audit is of opinion that the permanent roads maintained in proper order should not be depreciated and that the depreciated value standing in the books at the time should be charged to the district and value recouped to the commercial concern.

Government have passed orders that the Saw Mill machinery at Olavakkot should be sold but the disposal of the mill buildings, land and railway siding will be considered by the Chief Conservator only after the disposal of the mill.

One Holt tractor borne on the books of the division at ' Nil ' value was sold for Rs. 2,500 to the Tea Estates, Limited, after a complete overhaul and reconditioning.

The Fordson tractors belonging to the Skidder have been advertised for sale by the Chief Conservator and so far no offers appear to have been received.

The telephone line was dismantled as it was of no use to the District Forest Officer, Palghat, and the materials will be disposed of if possible to the Telegraph Department.

The total cost of maintenance of the Saw Mill and Machinery during the year was Rs. 4,000 including Rs. 1,600 spent on account of overhauling the Holt tractor before its sale and Rs. 398 for insurance.

4. *Machine shop.*—This has been idle as all the other mills are also closed. Its value has been transferred from the Chenat Nair concern to the General Forest assets account to which it actually belongs.

5. *Wood workshop.*—This was closed on 31st March 1930 and in G.O. Ms No. 194, Development, dated 11th February 1931, it has been transferred to the Industries Department and for want of funds the removal by the above department has been deferred till 1932–33.

6. *Engineering works.*—The important works done by the division during the year were :—

(1) Road and bridge construction at Nilambur.

The formation of the road was completed during the year under review. Soling and metalling is being done this year.

The construction of the first bridge at Karulai was practically completed during the year except the actual flooring, the nature of which has not yet been definitely decided upon.

The abutments and two piers of the 4-span bridge at Nedungayam were also taken up and work continued satisfactorily until the monsoon.

Considerable difficulty was experienced in getting down to solid rock for the foundations and a 6-inch power pump had to be purchased to keep the coffer dams free of water.

(2) *Tramline survey.*—This was completed and plans and estimates have been submitted to the Chief Conservator.

(3) *Construction of forester's quarters at Beypore.*—Total estimate Rs. 1,425. The work was completed within the year.

(4) *Investigation of alignments for roads and bridges.*—The following roads and bridge works, etc., were inspected and reports submitted :—

(i) Attapadi Block No. 6 regarding temporary extraction roads.

(ii) Proposed bridge site on the Begur-Bavali road (Wynaad).

(iii) Inspection of mechanical extraction works at Nilambur.

(iv) Inspection of Kal-Ar valley regarding possibilities of using a tractor for hauling sleepers (by Mr. Wilson).

(v) Palamalai bungalow was also inspected and report submitted regarding repairs to the roof.

7. *Portable Saw mills.*—Beypore Saw mill was ordered to be closed on 30th April 1930 in G.O. Ms. No. 958, Development, dated 7th May 1930, but was working up to 21st May 1930 for completing the railway key order. During the one month it was working, it has converted 4,861 cubic feet of logs with 3,164 cubic feet of outturn.

8. *Central stores.*—The stores were advertised for sale under orders of the Chief Conservator, but there are no offers except for a few items at considerably reduced value which have been submitted to the Chief Conservator for orders.

9. *General.*—Mr. M. S. Raghavan, Extra Assistant Conservator of Forests, was attached to this division until January 1931 and was in charge of the tramline survey.

All the executive staff with the exception of one ranger and three foresters have been transferred to other divisions.

The work and conduct of the staff had been very satisfactory throughout, and the work of Mr. P. Sankunni Menon deserves special recognition in connexion with the construction of the steel girder bridges at Nilambur.

The permanent office staff which has been reduced to one accountant and one clerk had considerable difficulty in keeping up with the work as the liquidation of the Chenat Nair concern was still in progress and considerable correspondence in connexion with the Saw mills and Extraction division had to be dealt with.

Annual forms are submitted separately.

COIMBATORE,
31*st August* 1931.

E. S. DAWSON,
Forest Engineer, Coimbatore

ADMINISTRATION REPORT

OF THE

FOREST DEPARTMENT

OF THE

MADRAS PRESIDENCY

FOR THE

YEAR ENDING 31st MARCH 1932

MADRAS
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS

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BOMBAY BRANCH
OF THE
Royal Asiatic Society.

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Proceedings of the Chief Conservator of Forests

Proceedings No. 459, Press, 20th October 1932

Administration Report—Forest Department—1931-32.

R. D. Richmond, Esq., C.I.E., I.F.S.,
Chief Conservator of Forests.

Proceedings—No. 459, Press, dated 20th October 1932.

I.—INTRODUCTION.

Considerable progress was made in the year in the organization of management and the preparation of working plans. There has, too, been a steady access of knowledge of the sylvicultural requirements of the principal species, while the correct methods of establishing regeneration have become better understood. If a methodical stock-taking of what the forests contain has revealed that some of the tentative estimates, notably in South Kanara, were optimistic, and other of the earlier specific estimates incorrect, it is nevertheless the fact that those of the forests so far examined are of considerable present or potential worth and that under properly devised systems of management they will constitute a considerable asset.

2. The cold water school of thought draws attention to the fact that it is not possible to dispose of the whole of the material which some recent plans have shown that it is legitimate to exploit. Though this is literally true, at the moment, there is no evidence whatsoever that, with the return of more normal times, the demand will not also resume normality and, in the meantime, the obvious step of curtailing output so as to avoid an accumulation of timber stocks has been taken. And a temporary setback may prove in the end to be a positive advantage if it is possible to provoke the use of equally good and equally cheap Madras timbers rather than that the money of the Province should be spent outside it as is the case at present. A considerable handicap to Madras is that its principal timber producing sources are poorly accessible to the main consuming centres; but, even so, much of the use of imported woods is uneconomical while it is difficult to induce even consuming departments of Government to believe that there is any useful timber other than teak.

3. With a restriction on exploitation there is naturally a less area to regenerate and in consequence a restriction of expenditure under all heads has fortunately not reacted to the detriment of something so essential, for work of this nature, if not at once remunerative, is essential unless the first principles of forest management are to be departed from. A forest

is not a thing of only the present; matters have not reached the stage at which it is necessary to encroach upon capital and, if what is taken away cannot be replaced, there should be no taking away. Similarly it is not economical to neglect other, if less direct, matters influencing the perpetuity of the forests—general protection, fire protection, the maintenance of roads, other works and the like. Important as it is that there should be a financial return, and when full development has been reached this will be considerable, the needs of the people in respect of timber, fuel, grazing, water, and so on should not be overlooked.

4. An inability to provide funds for the work of a Second Sylviculturist is to be regretted. Some progress is being made by local effort in the highly important matter of ascertaining how best to reconstitute the degraded types of forest, degraded owing to the demands of all kinds imposed upon it, but no satisfactory solution will be found until it is possible to organize this work under a specialist officer. This is the type of forest that means the most to the people.

II.—GENERAL ADMINISTRATION.

(i) ALTERATION IN AREA.

5. The area of Reserved Forests (including Ryots' Forests) at the commencement of the year was 18,963 square miles. Eight square miles were disreserved and 1½ square miles were added, the area at the end of the year being 18,955 square miles of which 3,338 square miles, classed as Ryots' Forest, are under the control of the Board of Revenue.

6. The area of Reserved Lands at the beginning of the year was 350 square miles which increased to 453 square miles by the end of the year due to the preliminary notification of areas destined to be Reserved Forests in Godavari, and to the notification under section 26 of the Forest Act, by Collectors, of small areas in Anantapur, Cuddapah and Kurnool for management by panchayats. The area at the end of the year was 453 square miles.

(ii) FOREST SETTLEMENT.

7. The area under settlement at the commencement of the year was 104·33 square miles to which an area of 95·14 square miles was added. Twenty-two square miles were settled during the year, but were not actually declared Reserved Forest until after the close of the year. A balance of 177 square miles remains to be settled. The principal areas under settlement are situated in the Upper Godavari division and the Rampa Agency.

8. The selection and demarcation of blocks for reservation in the Rampa Agency has been completed.

9. Out of an area of 306 square miles forecasted for reservation in the Balliguda Agency, an area of 150 square miles has been selected. Progress has recently been slow for reasons that are not apparent.

(iii) DEMARCATION.

10. Thirty-three miles of new boundaries were demarcated at a cost of Rs. 2,488. Of a total length of 23,062 miles of artificially marked boundaries, 17,424 miles were kept in repair, of which 13,757 miles were maintained by subordinates free of cost or as part of fire-protection operations, and the balance at a cost of Rs. 4,579, thus leaving 5,605 miles unrepaired. At the close of the year, 336 miles of boundary lines remained to be demarcated chiefly in the Kollegal, North Coimbatore and Madura divisions.

11. In Ganjam 48 miles, and in Upper Godavari 36 miles of frontier boundaries were inspected by gazetted officers. In Madura and Tinnevelly eight miles of estate boundaries adjoining Reserves were cleared. In the Nilgiris, the Wynaad and the North and South Mangalore divisions the year's programme of inspection of frontier boundaries was carried out by the District Forest Officers.

(iv) SURVEY.

12. The Survey of India completed the 4-inch scale survey of the Galleri Extension Reserves in the Ganjam division and have taken up the topographical survey on a 1-inch scale of the Gudem Agency in the Vizagapatam division. In Central Salem they completed the survey of the Aranha and Thirthagiri blocks. In South Salem they have finished the topographical survey of Vedambium, Veppadi, Vengamudi, Venjarai, Periasholai, Gundur, Poolambadi, Ariyalur, Attur-Manmalai, Adukkam Pudukkombai, Perumalmalai and Bailnad Reserves.

13. The Madras Survey Party surveyed the external boundaries of thirteen Reserves in Lower Godavari. In Central Salem the resurvey of the Harur taluk which was in progress has been suspended owing to financial stringency. The survey of the outer boundaries of the Bailnad, Adukkam Pudukkombai and Perumalmalai Reserves was completed. In South Coimbatore eight out of the eleven areas assigned to planters were surveyed. Survey was also in progress in South Mangalore.

14. The Forest Reference maps were kept up to date.

(v) ROADS AND COMMUNICATIONS.

15. The total expenditure on new works was Rs. 39,025 and on repairs Rs. 1,14,708 as against Rs. 54,439 and Rs. 1,12,526, respectively, incurred in 1930–31.

16. The principal new work was then on the two girder bridges and a length of connecting road in the Nilambur division: these will be completed in the current year.

17. Forty miles of new roads were constructed and 2,075 miles of existing roads were repaired as against 45 miles and 2,116 miles, respectively, in the previous year.

18. The condition of most of the forest roads in the Second Circle is reported to be unsatisfactory owing to shortage of funds. Roads in other circles are stated to have been kept in a fair state of repair; but there can

be no doubt that in framing the budget forecast for the current year the need for economy was regarded to an extent which is wasteful. If roads are not kept in proper repair they will ultimately have to be remade.

(vi) BUILDINGS.

19. No new work of any particular importance was undertaken.

20. The total expenditure amounted to Rs. 20,375 for new construction and Rs. 58,586 on repairs or a total of Rs. ·79 lakh as against Rs. 1·56 lakhs in the previous year. The decrease was due to the curtailment of expenditure on account of financial stringency.

(vii) OTHER WORKS.

21. The total amount spent during the year on the construction and repair of wells, tanks, etc., amounted to Rs. 5,761 as against Rs. 11,135 in the previous year.

22. *Improvement of water-supply in grazing grounds.*—A sum of Rs. 1,043 was spent on the improvement of the water-supply in grazing grounds in the Guntur, Anantapur, Kurnool East and West and North and South Cuddapah divisions. The public were also permitted to repair existing water-sources and to construct new wells and tanks at their own cost in Guntur. In the Fifth Circle no improvements were undertaken owing to financial stringency.

(viii) FOREST ENGINEERING.

23. The Forest Engineer was principally engaged on the construction of the Nilambur bridges. He had a certain amount of work in connexion with the liquidation of the Chenat Nair concern and was responsible for the maintenance of the saw mills. He investigated and advised on extraction problems in connexion with the preparation of working plans and was deputed to Tinnevelly to examine the possibilities in respect of the constructions of two bridges at Mundandurai. He delivered a series of lectures at the Forest College. The scope of his activities is extending and, as soon as an opportunity presents itself, he will be required to make a systematic survey of the means of extraction in all divisions; much can no doubt be done to facilitate the extraction of all forms of produce.

(ix) LIVESTOCK.

(*a*) *Elephants.*

24. The number of elephants at the beginning of the year was 132 valued at Rs. 3,10,079.

25. During the year six elephants were captured (five in the Wynaad and one in the Palghat division) and five calves were born. Twenty-three elephants (including four new captures) were sold for Rs. 13,730 and nine died or were destroyed. The number at the end of the year was 111 valued at Rs. 2,74,979.

26. The experiment of dragging logs by the mouth-rope method was tried with twelve elephants. The results were encouraging, but the loads prescribed were not comparable with those usually dragged by the harness method. The experiment is being continued with increased loads.

27. Owing to the restriction of timber extraction and to the difficulty experienced in disposing of surplus animals capturing operations have been suspended for the time being.

28. There is a marked increase in the numbers of wild elephants, notably in Kollegal and North Coimbatore, and it is probably necessary that steps be taken to reduce them.

(b) Cattle.

29. There were 39 buffaloes, bullocks and asses valued at Rs. 2,914 at the beginning of the year. Two bulls, four buffaloes and two asses were sold, one buffalo died and six asses were destroyed by tigers. Two bulls and one buffalo were purchased and three ass foals were born. At the end of the year there were thirty animals, valued at Rs. 2,268.

(x) Breaches of the Forest Act.

Cases.	Injury to forests by fire.		Unauthorized fellings.		Unauthorized grazing.		Other offences.		Total.	
	1930-31.	1931-32.	1930-31.	1931-32.	1930-31.	1931-32.	1930-31.	1931-32.	1930-31.	1931-32.
Reserves.										
Cases taken to Court	14	18	4,343	4,933	1,088	1,449	206	228	5,651	6,623
Cases compounded	28	25	5,708	5,789	2,082	2,361	610	682	8,428	8,857
Cases undetected	969	1,023	190	300	15	12	4	7	1,178	1,342
Total ..	1,011	1,061	10,241	11,022	3,185	3,822	820	917	15,257	16,822
Unreserves.										
Cases taken to Court	66	6	1,499	1,323	297	34	105	85	1,967	1,448
Cases compounded	75	185	6,166	4,820	628	99	554	344	7,423	5,448
Cases undetected	32	24	112	122	..	..	7	12	151	158
Total ..	173	215	7,777	6,265	925	133	666	441	9,541	7,054
Total Reserves and Unreserves.										
Cases taken to Court	80	19	5,842	6,256	1,385	1,483	311	313	7,618	8,071
Cases compounded	103	210	11,874	10,609	2,710	2,460	1,164	1,026	15,851	14,305
Cases undetected	1,001	1,047	302	422	15	12	11	19	1,329	1,500
Grand Total ..	1,184	1,276	18,018	17,287	4,110	3,955	1,486	1,358	24,798	23,876

30. There has been an increase in all forms of offences in Reserved Forests, particularly under unauthorized fellings (7·6 per cent) and unauthorized grazing (20 per cent). This is attributed to greater vigilance in detection on the part of the subordinates.

31. Increased attention to grazing offences is not, however, reflected in the grazing revenue which shows considerable reduction, though there seems to be no reason why the demand upon departmental forests should decline while that upon panchayat forests remains the same. An enquiry into this matter has been undertaken, but no convincing reasons have been advanced to account fully for the decreasing revenue and closer personal attention to this is required of Conservators.

32. Of the 7,261 cases from Reserved Forests disposed of by magistrates, in 4,188 cases the accused paid the compounding fees in Court, and 492 (or 16 per cent of the cases which actually went to trial) were acquitted. Of offences from unreserves 20 per cent of the cases actually going to trial resulted in acquittal. In no fewer than 5,145 cases in which the accused admitted their guilt and agreed to compound they failed to do so until they went to court; in 5,145 different cases subordinates were taken from their work to no purpose and considerable sums were wasted in travelling allowance. There seems to be no reason why this should further be put up with and why in such circumstances the magistracy should not impose fines slightly higher than the compounding fees. If the accused is not prepared to pay this it is always open to him to go to trial. It is proposed to address Government separately on this matter.

33. A sum of Rs. 1,66,387 was realized as compounding fees against Rs. 1,93,077 in the previous year. The average compounding fee for each case was Rs. 13–10–6 and for each accused Rs. 6–15–7 as compared with Rs. 14–7–1 and Rs. 7–4–9 respectively, in the previous year. It is not evident why, with offences on the increase, penalties should be reduced and there is no order requiring a cut in compounding fees as in pay.

34. Investigation by District Forest Officers into cases of forest offences continued to be unsatisfactory in spite of admonitions on the subject. The particular attention of Conservators is directed to this; it is for them to ensure that orders are carried out by those for whom they are responsible. There may have been few important cases but, as has been pointed out before, it will generally be the apparently simple case that is the false one—often without an accused at all, the beat subordinates putting up dummy cases and paying the compounding fees themselves as a cover for the condition of their beats. Also it is observed that the percentage of conviction in cases which have actually gone to trial has dropped from 90 per cent to 84 per cent—this is unsatisfactory pointing to lack of investigation or ineffective presentation.

35. Investigation by Range Officers has been insufficient particularly in the Nilgiris, Madura, Chittoor, Vellore, Tinnevelly, Guntur, Nellore and Central Salem divisions.

36. Thirty-nine sandalwood cases were reported in the year. Cases of this class should never be compounded.

37. Rewards to the extent of Rs. 1,370 were distributed to Forest subordinates, Police officials and private individuals who helped in the detection of sandalwood and other offences. Rewards might well be given on a more liberal scale.

38. Surprise inspections and special secret patrols were organized in most districts with results which are reported to have been satisfactory, but it is felt that enough is not done in this direction. Protection in parts of Cuddapah, South and Central Salem, the Vannathiparai forests of Madura, and the Bolampatti range of Palghat is notoriously bad. There is ample provision everywhere for the people to obtain their requirements without difficulty and Conservators must insist upon proper protection.

39. The complaint is sometimes heard that magistrates inflict inadequate punishments, but there is no need for District Forest Officers to adopt the *non-possumus* attitude they so often do. It is not for a magistrate to assess damage to the forest without proof, or to know of the great cumulative effect of offences which appear to him to be of a petty nature. It is the duty of District Forest Officers to supervise the presentation of cases and themselves to give evidence as to damage and so on where really deterrent sentences are considered to be necessary.

40. Towards the end of the year Government sanctioned revised Sandalwood Transit Rules for the Salem, South Arcot and Trichinopoly districts. The Sandalwood Transit Rules of other districts are being revised on the same lines.

41. There were 89 reported cases of illicit shooting and hunting. The matter of game protection does not receive the attention it should; that the increase in licensed arms has made this the more difficult is undoubtedly the case but far more might and should be done by District Forest Officers to mitigate the evil. Their notice has been drawn to this more than once.

(xi) Protection from Fire.

42. Early-burning was carried out as usual in the Second, Fifth and Sixth Circles. The total area dealt with under this system was 935 square miles against 922 square miles in the previous year, the recorded expenditure being Rs. 4–6–11 per square mile against Rs. 4–2–1 in the previous year. Twenty-eight square miles were subsequently burnt, that is to say, were burnt twice.

43. Conservators are discreetly silent as to the real effect of this practice of early-burning as a method of protection and should, in future, specifically comment, as a result of personal knowledge, on the real success or otherwise of the year's work. Properly carried out there can be no doubt that the method has much to commend it in certain localities; but it is to be feared that more often than not burning is done at a time when it is impossible to avoid damage to the tree growth and also that the supervision is superficial. Further it is not believed that it is possible to early-burn in a proper manner for the recorded figure of cost. The special attention of Conservators is directed to the need of the closest control in this matter.

44. It is undoubtedly the fact that the introduction of early-burning has done a good deal to vitiate the efforts of the past; subordinates and the public alike have gathered the impression that the burning of the forest no longer signifies.

45. The area over which other special fire-protection was attempted was 4,070 square miles of which 341 square miles (8·38 per cent) was unsuccessful, the corresponding figures for the previous year being 4,108 square miles, 372 square miles and 9·05 per cent respectively. The bulk of the damage by fire was, as usual, in the First Circle, the percentage of the area burnt being 17 against 20 in the previous year. About 245 square miles were burnt of which 163 square miles were in the Nugur range of the Upper Godavari division. This range, at one time, included in the Central Provinces, contains little forest of much value, the cause being repeated burning. An attempt to close burnt areas to grazing is resisted by the Collector of East Godavari on the ground that grazing would be interfered with. In such circumstances it is for consideration whether it may not be desirable to withdraw establishment (the range does not pay its way) and abandon the forest. The expenditure on special protection during the year was Rs. 32,734, or Rs. 8–0–8 per square mile, as against Rs. 31,415, or Rs. 7–10–0 per square mile, in the preceding year.

46. Rewards amounting to Rs. 2,545 (as against Rs. 1,529 in the previous year) were distributed to the Khonds in the Ganjam division, to the Koyas and Reddis of the Upper Godavari division and to the settlers in the Peddapur Agency in the Lower Godavari division for assistance rendered in fire-protection. As the forest dwellers in the Lower Godavari division have been indifferent to fire-protection, and as the rewards have failed to stimulate them, it has been decided to put an end to them and the Conservator will do well to exercise the closest supervision over the grant of such rewards in other divisions—what is paid is often undeserved and unearned.

47. In the Upper Godavari, the North Cuddapah, the Tinnevelly, and the Palghat divisions some areas were closed to grazing on account of severe and repeated fires in order to provide a period of recuperation to the forests and in the Vellore division the grazing fee was enhanced as a penalty for incendiary fires. But, considering the number of fires which have occurred during the year, it is evident that the policy of closure, than which there is no more effective way of reducing the incidence of fires, has not been followed to the extent it should have been. There need be no question of fixing the responsibility for the fires upon the grazing or any other interests, direct proof of which is very rarely possible, but the burnt areas must be closed to grazing to provide a period of recuperation. In order to render the closure effective, it must be promptly applied and illicit grazing in the closed areas must be severely penalized.

(xii) PROTECTION AGAINST INJURIES FROM NATURAL CAUSES.

48. In the Nilambur division the investigation into teak defoliation was continued under the direction of the Forest Entomologist, Dehra Dun, the main work being the mapping of the defoliated areas. In the Wynaad, there was an attack of teak defoliation in Begur range, and a

mild attack in plantations in the Nallamalais. *Phassus malabaricus* is troublesome in a number of new teak and *Gmelina* plantations.

49. Logs of *Pterocarpus marsupium* in the Godavari were attacked by insects identified at Dehra Dun as species of *Cacia* and *Crysobothris*. In Palghat, much damage is done to introduced *Acrocarpus fraxinifolius* by *Terias Sylhatana*; dusting the plants with calcium arsenate is being tried as a preventive. In Upper Godavari rats are reported to have damaged a teak plantation. Bison have done a certain amount of damage to *Gmelina* and teak plantations and also to young sandal in Vellore. Wild elephants damaged young sandal in North Coimbatore and Tinnevelly and teak plantations wherever they exist. Apart from the damage done to plantations, elephants have increased in some places to an extent that warrants their organized destruction, a matter which is under consideration, the position being aggravated by the fact that for the time being capturing operations are suspended as exploitation work is curtailed and also as there is no market for elephants. Of recent years sambhur in Tinnevelly have become addicted to young teak which is destroyed in this way to an extent that has become serious.

Pigs and monkeys caused much injury to young plantations in Nilambur.

50. In the Nilgiris frost was particularly severe and young Eucalyptus plantations suffered considerably.

51. The destruction of prickly-pear by the Cochineal insect proceeds rapidly and steps are being taken to regenerate the blanks so caused with tree species.

52. Lantana continues to spread and the matter of biological control has been suggested to Government. In the Hawaiian Islands this has proved effective. Similarly Eupatorium is rapidly overrunning the Nilgiri plateau and is spreading to Nilambur and the Wynaad. Loranthus gives a certain amount of trouble in a number of districts and is on the way to killing out completey *Acacia melanoxylon* on the Nilgiris.

53. Strobilanthes is a nuisance in a number of areas, but it appears to be possible to eradicate it by cutting it down to ground level.

54. The Indian Institute of Science, Bangalore, continued the investigation into sandal spike disease on the biochemical, and the Forest Entomologist, Dehra Dun, on the entomological, side. Definite results are not yet forthcoming though a good deal has been learnt and the proper sylvicultural treatment of sandal is now better understood. Whether definite means of preventing the disease can be evolved, or not, it must be evident that if the trees can be maintained in a generally healthy condition their powers of resistance to this or any other form of disease will be increased. Sandal is principally found in a degraded type of forest in which the host trees are ordinarily unhealthy and it must be the aim gradually to transfer it to a more wholesome surroundings, when the fate of the present stock will not be a matter for concern.

55. Climbers and creepers are reported to be dealt with by the beat subordinates, but it is not clear in some cases whether this is a generalization or whether the work is done on definite and approved schemes as it should be. Special attention was drawn in the review for 1929–30 to the necessity for systematized work.

(xiii) FOREST PANCHAYATS.

56. The total area under panchayat management is 3,338 square miles. Certain small areas originally classified as Ryots' Forests have been retransferred to the Forest Department but have not yet been formally reclassified.

57. The Forest Village System was in operation only in the North Mangalore division, where three panchayats are reported to have discharged their duties satisfactorily. This system is well suited to the local conditions in South Kanara and might well be extended, but the general forest concessions in this district, by which the ryots are able to obtain domestic and agricultural requirements free and without incurring any obligations, stand in the way.

(xiv) FOREST COLLEGE.

58. No Government students were deputed either for the 1930–32 or for the 1931–33 course and it must be sometime before the number of trained men required is again sufficient; there is already a shortage and considerable inconvenience will continue for the next three or four years. The strength of the 1930–32 class was 20—four from the Central Provinces, one from Bihar and Orissa, six from Bombay, three from Hyderabad, one from Indore, one from Baroda, two from minor States and two private students. One student was discharged from the College, having been declared unfit for further service. The examination results were satisfactory. Of the nineteen students, sixteen secured Higher Standard Certificates and three Lower Standard Certificates. None obtained Honours.

59. Twenty-one Government students, obtained from the ranks of the Foresters, have been deputed for training in the 1932–34 class; this is not a completely satisfactory method of recruitment as these men are of rather too old an age, but there was no more expeditious manner of resuming training. For the 1933–35 class there will be direct *ad hoc* recruitment.

60. A post of Instructor continued to be held in abeyance: this arrangement will be made permanent.

61. The net cost of the maintenance of the College was Rs. 13,544 as against Rs. 26,857 in the previous year.

62. The curriculum followed the usual lines, the only change of importance being the formation of a new camp in North Salem so that better attention might be paid to the study of sandalwood and its exploitation.

63. The health of the students both at the College and in camp was very satisfactory. The extent to which their physical condition improves during the course is remarkable.

(xv) VERNACULAR TRAINING SCHOOLS.

64. No Vernacular Training Schools were held during the year. This decision was taken on grounds of economy, but it will be necessary to resume this class of training in the current year.

III.—SYLVICULTURE.

65. The report of the Provincial Sylviculturist is published separately. It deals with research work which has hitherto been almost entirely confined to the West Coast and other major forests. The need for a second Sylviculturist for research work in the dry districts has been accepted, and an officer is available for the purpose, but financial restrictions have rendered it impossible to provide funds for the necessary experimental work and this research, upon which so much depends, remains in abeyance. Something has been done by district officers, but there cannot be appreciable progress until the work is directed and coordinated by a specialist officer. Fifty-five years ago in connexion with the formation of fuel plantations in Cuddapah certain tentative conclusions were reached as to the most suitable species to use in arid and infertile tracts: those conclusions in respect of *Prosopis* and *Acacia leucophlœa* are likely to be confirmed, but the information has been obtained in an entirely fortuitous manner and the need for systematized work and the careful recording of results, whether positive or negative, cannot be emphasized too strongly. The amount spent on research work amounted to less than 2 per cent of the gross revenues.

66. While some experimental work has been done in the districts, with varying success, it is felt that more might have been attempted and it has again been necessary to impress upon Conservators the imperative necessity of keeping the Sylviculturist in touch with all that is being done independently of that officer.

67. Encouraging results have been obtained in some of the small timber and fuel forests by piling and burning the waste material after felling and dibbling seed in the ashes.

68. There persists a neglect to refer to experimental work of other than the current year; as, for example, a work inaugurated in Upper Godavari whereby it was sought to obtain teak regeneration by advance fellings, associated with burning and sowing. Success was obtained at the outset and if this is maintained it may well be that this, the cheapest method of all, may be found suitable for adoption in a number of areas. Similarly no detailed mention is made of the stage reached in the solution of the difficult problem of regeneration in the sal Ravine Working Circle in Ganjam.

69. It is now definitely established that the raising of teak from stumps is the most satisfactory method to adopt in the Wynaad, the Nilgiris, South Coimbatore and in fact everywhere, except perhaps in Nilambur, where the favourable conditions make it possible to adopt the cheapest method. And the fears expressed in some quarters that trees originating in this way would ultimately prove to be unsound have been set at rest. The most suitable time for setting out stumps is under investigation and there appears to be little doubt that the earlier this is done the better, provided there is an ample reserve for the replacement of casualties in the event of disappointment in regard to rain.

70. Experiments in the use of *Tephrosia candida* as a cover crop in the earlier stages of a teak plantation have not been properly pursued and must be repeated. Renewed efforts must be made to raise sal in

conjunction with field crops in the north of Vizagapatam: this method has met with great success in Bengal and the process has been admirably described by the Conservator of that Province.

71. Greater attention has been paid to obtaining a mixture of species in artificial crops of teak, the orders forbidding the removal of woody species in weedings and clearings appear to be generally respected, but those instructions are repeated here as it is felt that the matter is one of first-class importance. Such mixture and the provision of an adequate underwood are essential to the production of first-class teak, and may be obtained without expense.

72. More is known about the raising of teak crops in the Wynaad, but the growth is irregular and slow.

73. Initial work on regeneration in mixed teak forest worked on the selection method is encouraging. Some excellent examples are to be seen in the Wynaad and South Coimbatore. Similar work, with appropriate species, is conducted in the evergreen areas, an attempt being made to restock with the more valuable species the gaps resulting from the selection fellings. There has been some disappointment in respect of *Acrocarpus fraxinifolius* which was most promising in the early stages. This is due to a defoliator. But while it is necessary to regenerate in whatever manner appears immediately possible it is only reasonable to suppose that the soundest method to adopt for this class of forest is to regenerate in advance of the fellings, and to tend at the time of felling whatever natural regeneration already exists, and this is often considerable. Research into the best manner of achieving this result is proceeding, but whether regeneration be by gaps, or in advance, it is clearly to be remembered that though regeneration of the less valuable species may be present, or easily obtained, it is to be disregarded, for it is only the most valuable species that it is profitable to exploit.

74. The planting of casuarina was continued in Lower Godavari and Nellore. A suggestion considerably to extend the scope of the work in the latter division is under consideration.

75. The work of reclaiming and fixing the shifting sands of the Kudiramoliteri in Tinnevelly continued, 500 acres being planted up. The area so treated decreased considerably as did the cost per acre in spite of the adoption of a closer planting distance.

76. The artificial propagation of sandal continued in a number of districts with varying degrees of success. So much is now known of the correct methods that failure can only be due to neglect or to the selection of unsuitable localities. An interesting experiment in the raising of this species with field crops is in progress and, so far, a remarkable degree of success has been obtained in the Nilgiris, North Coimbatore and Kollegal. Failure in North Salem is inexplicable. But an attempt to combine sandal with permanent or semi-permanent cultivation, such as was seen in Kollegal, is to be deprecated and, although the few trees ordinarily left unfelled in the case of the temporary cultivation and such regrowth as comes up, will supply a certain quantity of host plants, such cannot be relied upon wholly and tree species, preferably *Cassia siamea*, should be artificially introduced. It appears likely that the policy to

adopt in respect of sandal is to introduce it artificially into suitable high, or semi-high, forest areas where it does not occur at present and gradually to withdraw attention from the areas of degraded forest in the neighbourhood of habitations, which form its present habitat. There appears to be justification for stating that sandal is an exotic, which would account for the areas of its occurrence, but it will grow readily almost anywhere and it cannot be kept in a condition fit to resist disease if it is dependent upon unhealthy host trees. It has been stated that sandal does not respond to any cultural process, but such is not the case—it is easily grown.

77. A sum of Rs. 75,154 was spent on artificial regeneration against Rs. 99,883 in the previous year.

78. Government decided in the year, after long consideration, no longer to maintain the plantation accounts which it had been intended to keep throughout the life of a crop. That these were unnecessary is evident but it is not to be supposed that the costing of plantation work is not of importance, or that costs and interests may be ignored in formulating proposals for working and regenerating a forest. The Chief Conservator has been gratified to find that the regeneration ledgers, wherein should be recorded all items of work with cost, up to the time a crop is established, are, with a notable exception in South Mangalore, carefully maintained and he trusts that continued attention will be paid to these important records.

79. The following areas were worked under the various sylvicultural systems:—

	ACS.
Timber clear felling	924
Simple coppice	27,203
Coppice with standards	3,713
Selection fellings	191,322
Improvement fellings	138,232
Improvement cum clear fellings	74,417
Sandalwood selection fellings and the extraction of dead trees	122,847
Bamboo selection fellings	1,065,853

while thinnings were carried out over 712 acres.

80. A few years ago considerable areas hitherto worked as coppice with standards were converted to simple coppice. The latter system is in many ways preferable to the former but it is perhaps the case that the transfer has gone too far and that too little attention is paid to the production of small timber and wood suitable for agricultural implements. Where areas managed for the latter purposes are not readily available coppice with standards should be reverted to and in the preparation or revision of all working plans this instruction should be taken into consideration.

IV.—WORKING PLANS.

81. At the close of the year sanctioned working plans, or schemes, were in existence for 9,793 square miles; but this area includes plans for reserves now under panchayat management and Conservators should ensure that the returns submitted next year are confined to forests under departmental management.

82. Plans for some 3,300 square miles were under preparation or awaiting sanction, while areas without plans at all amount to about 7,000 square miles.

83. Plans completed by the special branch so far are those for Ghumsur, the Wynaad (deciduous and evergreen), Mudumalai, North Mangalore, South Mangalore, Palghat and Mount Stuart, and the areas now receiving attention by the five divisions are Tinnevelly, North Coimbatore and Kollegal, Lower Godavari, the balance of South Coimbatore other than Mount Stuart and Madura. Revisions of important time-expired plans are overdue and will be taken up as soon as circumstances permit.

84. The examination of Kollegal has disclosed the fact that there exists bamboo in sufficient quantity, and which could be made readily available, for a paper mill which could conveniently be situated at Mettur, where lime is available and where there is a line of rail. The Forest Research Institute have reported favourably on the possibilities and the details have been supplied to the Industries Department.

85. A few plans and schemes have been or are being, prepared by local officers: the majority of these are of a stop-gap nature and will require thorough overhaul and revision by the special branch in due course. One plan, for a small area in Nellore, has been in gestation for seven years.

86. Control records are checked by the territorial Conservator, the Working Plans Conservator scrutinizing them as well and submitting periodical reviews to the Chief Conservator. The records are better prepared than they were, but there is still room for improvement.

V.—UTILIZATION.

(i) SUPPLY OF PRODUCE.

(a) Timber.

87. The total output of timber was 63,740 tons, or a little over 25 per cent less than that of the previous year. The details are—

	By Government.		By purchasers.	
	1931-32.	1930-31.	1931-32	1930-31.
(1)	(2)	(3)	(4)	(5)
	TONS.	TONS.	TONS.	TONS.
Reserved Forests, Leased Forests and Reserved Lands	20,740	37,860	17,900	13,440
Unreserves	2,500	640	18,240	28,880
Total ..	23,240	38,500	36,140	42,320

	By free grantees.		By right holders.		Total.	
	1931-32.	1930-31.	1931-32.	1930-31.	1931-32.	1930-31.
	(6)	(7)	(8)	(9)	(10)	(11)
	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.
Reserved Forests, Leased Forests and Reserved Lands	560	720	800	360	40,000	52,380
Unreserves	2,680	3,360	320	320	23,740	33,200
Total ..	3,240	4,080	1,120	680	63,740	85,580

88. The total quantity of timber exploited from departmental forests showed a marked decrease; a dull market made it essential to restrict the output of the main producing centres. Thus the output of the Sixth Circle decreased by nearly 9,000 tons, of which the Wynaad accounted for 4,800 tons. On the other hand, departmental work in the Unreserves increased, due to the exploitation of sleeper woods from Unreserves in South Kanara. The increase in the quantities exploited by purchasers from Reserves is principally due to extraction in connexion with a lease in the Ulandi Valley forests of the Fifth Circle, as well as to departmental work being replaced by contract agency in Ganjam.

89. The quantity of timber departmentally collected, and remaining undisposed of at the end of the year, was 1,247,000 cubit feet, as against 1,413,000 cubit feet, in the previous year. It is gratifying that the balances have been reduced but it has been considered to be advisable further to restrict output in the current year.

(*b*) *Fuel.*

90. Two lakhs nineteen thousand five hundred and sixty-two tons of fuel were removed from Reserved and Leased Forests, of which 12,700 tons were removed by departmental agency, as against 234,825 tons and 13,800 tons respectively in the previous year. The outturn from Unreserves was 15,950 tons as against 21,262 tons in the previous year.

91. There was a fall amounting to 13,525 tons under removals by purchasers which was mainly due to the sale of a smaller number of coupes in the Kurnool West and the Cuddapah South divisions, where owing to the fall in the price of fuel, trees in certain coupes were converted into timber instead of fuel.

(*c*) *Bamboos.*

92. The value of bamboos removed by all agencies was Rs. 3·44 lakhs against Rs. 3·94 lakhs in the previous year. The decrease was mainly in the First, Second and Fifth Circles and was due to poor prices realized for bamboo coupes on account of the general trade depression, though it does not appear that the general conditions have adversely affected this product to the same extent as others.

93. Some development is possible particularly in North Coimbatore, Kollegal and Lower Godavari by opening up with roads bamboo areas which are not so served at present and reference is made elsewhere to the possibility of developing a paper-making enterprise at Mettur.

The Rajahmundry pulp and paper mills have not taken up the lease of bamboo areas which had been arranged for them in Upper Godavari.

(*d*) *Sandalwood.*

94. Six hundred and seventy-two tons of sandalwood were sold for Rs. 6,12,802 as against 564 tons for Rs. 4,40,755 in the previous year. The average price realized was Rs. 912 per ton, as against Rs. 782 in the previous year, Rs. 1,395 in 1929–30 and Rs. 1,485 in 1928–29.

95. That it was possible to dispose of the whole of the stocks and at better prices is satisfactory; but this market remains very uncertain, only small quantities at a time are in real demand. Efforts have been made in conjunction with the High Commissioner to establish direct touch with users and samples are being sent for analytical trial to European oil distillers.

96. It is of interest to recall that in 1913–14 the average price realized was Rs. 558 and in 1924–25, Rs. 1,596, the highest on record. In the last ten years 6,462 tons have realized Rs. 77,21,818, the direct costs of production being only a little in excess of Rs. 5,00,000. It is thus evident how important a source of revenue this is and also that it is worth while to spend on research and cultural work far more than is devoted to the purpose at present.

97. Rao Bahadur K. R. Venkataramana Ayyar was deputed to study market conditions in the year and has submitted a valuable report. There is a considerable import of sandal substitutes from Australia, Africa and other countries, which are sold to an unsuspecting public at genuine sandalwood prices. It is proposed presently to address Government with a view to an increase in the import duties.

98. Efforts to effect retail sales of small quantities at a time for ceremonial and other personal use have not so far met with much success.

(*e*) *Grazing.*

99. 12·73 per cent of the forests managed by the department were closed to grazing, 11·55 per cent throughout the year and 1·18 per cent during part of the year. Grazing permits were issued for 1,409,175 animals as against 1,531,661 in the previous year, the revenue realized being Rs. 5,58,765 against Rs. 5,93,407 in 1930–31. Ninety-two thousand five hundred and fifteen animals grazed free of charge as against 86,135 in the previous year; the reasons for this should have been reported. The revenue foregone by allowing free grazing and grazing at concession rates was Rs. 46,014, as against Rs. 43,480 in the previous year.

100. In the panchayat forests permits were issued for 895,450 animals as against 895,781 in the previous year, and 1,892 animals were allowed free grazing against 2,204 in the previous year. To this the attention of Conservators is particularly directed in connexion with the large decrease in the numbers licensed to graze in departmental forests. The reasons given for this decline, namely, general distress, cattle disease, failure of rains and so on are not convincing and would apply equally well to ryots' forest cattle. Enquiry into the matter is proceeding. Were it really the case that the demand upon the forest had become less it would be a matter for satisfaction but this fact has not been established and the revenues are affected considerably.

In order to meet the demand for the saving of a definite proportion of the budget allotment it was decided to abolish the posts of those who issued grazing permits on commission. This step which is a source of inconvenience to the ryots will account to some extent for the decline in revenue.

101. The average incidence of grazing in Reserved Forests under the control of the department is 5·9 acres per animal as compared with 5·5 acres in the previous year, the incidence being as low as 3·17 in the Lower Godavari division, 3·21 in the Upper Godavari division, 4·07 in the Guntur and Vellore divisions, 4·58 in the Central Salem division and 4·7 in the South Kurnool division. These figures mean very little and much of the forest is overgrazed to its detriment, as well as that of the cattle. The limitation of grazing is not permitted and it is practically impossible, in the alternative, to close altogether conveniently situated pastures which could be preserved as such, indefinitely, for a limited number of cattle.

102. An enquiry has been commenced into the question of enhancing the rates of grazing fees.

103. There was complaint in the year of the working of the kancha system which has worked well in the Nellore division for a great number of years: the matter is under enquiry.

104. Three thousand eight hundred acres in the Gutikonda reserved forest in the Guntur district has been handed over to the Agricultural Department to provide concentrated grazing for breeding cattle. This is a step in the right direction: it is to be hoped that the experiment will be a success and that, if successful, it will be extended to areas the object of management of which is primarily the provision of proper grazing facilities under regulation.

105. Experiments were conducted in the North Coimbatore division for the artificial introduction of good strains of grasses and instructions have been issued to conduct similar experiments in certain other divisions. Success will not be obtained without some expense, but there is no reason why this should not be recouped by leasing out any area so stocked at a figure representing the true value of the grazing to be obtained from it.

(*f*) *Minor Forest Produce.*

106. The revenue derived from minor forest produce was Rs. 6,02,529 as against Rs. 6,44,453 in the previous year. The decline would have been the greater but for the fact that a considerable sum due in 1930–31 was actually collected in the year under report. There has been a considerable falling off in the lease amounts of avaram bark which is strongly competed with by wattle bark from Africa.

107. The collection of minor produce was principally through the agency of contractors. There can be little doubt, however, that certain items, the market for which is in foreign countries, could be more profitably dealt with departmentally but considerable expenditure would be involved. It is regrettable that the experimental departmental collection of gallnuts in North Coimbatore was abandoned; the reasons for so doing appear to have been unsound and the action taken to have been precipitate.

108. Experiments in lac cultivation continued at Devarbetta, Jowlagiri, Aiyur and Noganur in the North Salem division with satisfactory results and 2,735 lb. of brood lac was obtained from 1,003 lb. of seed

used. In Noganur, however, the yield was poor owing to damage by rats and squirrels. The experiments conducted in the North Coimbatore division were not successful and have been discontinued. In the Madura division they were successful but at a prohibitive cost. The questions of the conversion of lac into high quality sealing wax, and its marketing, are under consideration.

109. In response to a representation made by one of the chief exporters of nux vomica seeds to the effect that numerous complaints had been received from the manufacturers in Europe and America that the strychnine and alkaloid contents of the seeds exported subsequent to 1929 had deteriorated, an investigation into the cause of deterioration was taken up by the Forest Research Institute, Dehra Dun. Samples of fruits and seeds collected from East and West Coast districts, in different parts of the year, were supplied, and analyses were carried out. The results so far obtained have established the fact that the quality of the seeds collected by the department is quite normal and that the strychnine content is not materially affected by varying conditions of storage. It is, therefore, suspected that apparent deterioration is due to the adulteration of genuine seeds with a species of Strychnos, whose seeds closely resemble nux vomica, but contain very little or no strychnine. Further experiments are being made with samples obtained from exporters to confirm or disprove the suspicion.

110. The right to collect the fruit of Dhupa (*Vateria indica*) in several divisions in the Sixth Circle was leased in 1929, for a period of years. Unfortunately, economic conditions have rendered the marketing of the fruit unprofitable and the lease has been cancelled.

111. A better market for cutch was sought and samples were sent to the Imperial Institute. The rates prevailing make it appear, however, that it would not pay to manufacture and market departmentally. The prices obtained for standing trees have declined considerably and it is not possible to sell all that are available.

(*g*) *Removal of Forest Produce by Free Grantees and Right-holders.*

112. The estimated value of forest produce removed by free grantees and right-holders amounted to Rs. 88,760 against Rs. 85,120 in the previous year. These figures do not take into account the considerable, if unassessable, value of the produce removed in virtue of the concessions allowed in the South Kanara district. Most of the free grants were made for the reconstruction of houses destroyed by fire and in Tinnevelly by fire and floods. The principle that free grants should be made as far as possible from Unreserves, and from Reserves only when there are no Unreserves close by, has been generally followed in sanctioning free grants, and no case in which the provision for free grants was abused has been brought to notice.

(*h*) *General.*

113. The domestic and agricultural requirements of the people were catered for satisfactorily in the main. Under the orders of Government the system of supplying manure leaf (whether by the controlled coupe

system or by the uncontrolled permit system) where the need is acute has been continued. But the system is very harmful to the forests, and the policy of Government is gradually to wean the ryot from drawing his supplies from Reserves by encouraging him to grow his own manure leaf, the seed for this purpose being supplied by the Agricultural Department. In order to stimulate the production of leaf outside reserves, it was suggested that certain reserves be made available for the growing of manure leaf seed, but the Director of Agriculture stated that sufficient seed was already available, and that propaganda in this direction was having the desired effect, though not to the extent anticipated or hoped for.

114. As usual, the requirements of villages in small timber for agricultural implements, fuel and bamboos were well provided for by binding coupe contractors to supply them in the coupes at not more than certain maximum rates. The position in respect of agricultural implements is not satisfactory, however. Every facility for obtaining what he wants is provided to the ryot, but so exacting is he as to the shape and kind of wood he asserts is the only possible thing to use—those vary almost taluk by taluk—that it is difficult to satisfy him. Coupes specially set apart for this supply are neglected and it is evident that, in some places, a refusal to make use of what is quite suitable is an organized attempt to obtain a reversion to the permit system.

Teak poles obtained from early thinnings have been offered as plough shafts but in this, as in other matters, the ryot is very conservative.

(ii) COMMERCIAL UNDERTAKINGS.

Introductory.

115. The divisions and parts of divisions the accounts of which have been kept in commercial form have been styled commercial undertakings. It has been decided that, from the 1st April 1932, the commercial accounts will be abandoned and these areas will not, therefore, be specially reported on in future.

(a) The Russellkonda Saw Mill.

116. During the year, the liquidation of this concern was completed. The entire saw mill machinery, including spare parts and all the buildings, except those transferred to the Public Works Department were sold for Rs. 25,000.

(b) Chenat Nair Forests.

117. During the year, the concern continued in liquidation, and since the close of the year, the saw mill machinery has been sold for Rs. 27,000 and that of the wood workshop for Rs. 4,400.

Directly the mill machinery has been removed, the buildings and land will be disposed of.

All timber stocks have been realized.

(c) Mount Stuart Forests.

118. Consequent on the slump in the timber market, extraction during the year was restricted to 72,665 cubic feet as against 115,617 cubic feet in the previous year. A quantity of 43,469 cubic feet of superior quality logs was carted to the Pollachi depot, against 101,444 cubic feet in 1930–31.

119. The cost of production amounted to Rs. 1–6–1·88 per cubic foot of log delivered at Pollachi, against Rs. 1–1–3·87 per cubic foot in the previous year, the reason being the smaller output.

120. At Pollachi, only 40,975 cubic feet were sold against 91,034 cubic feet in the previous year. The average rate obtained, however, slightly increased, from Rs. 1–7–6 per cubic foot to Rs. 1–8–2·8, due to the greater proportion of teak to junglewood sold. Logs of inferior quality, not worth carting to Pollachi, were sold in the forest: the quantity thus sold increased from 10,860 cubic feet to 18,975 cubic feet. There was a drop in the average prices realized—from Re. 0–5–8 to Re. 0–3–3 per cubic foot.

121. The log trading resulted in a profit of Rs. 37,255 against Rs. 6,206 for the previous year. The improvement is more apparent than real, as in the previous year closing stocks in the forest were undervalued.

122. Two thousand one hundred and fifty-eight cubic feet of sawn timber were sold at an average rate of Rs. 2–2–0 per cubic foot against 5,707 cubic feet sold at Rs. 1–14–10 per cubic foot in the previous year.

123. Out of the logs consigned in the previous year for trial sale in Madura, the entire balance of 583 cubic feet was sold at an average rate of Rs. 1–5–2 per cubic foot resulting in a small profit.

124. No sales were made in the overseas market.

125. It has not yet proved possible to dispose of the saw mill, on which Rs. 474 was spent for care and maintenance in the year.

126. The year's work showed a profit of Rs. 17,127 as against a loss of Rs. 3,704 in 1930–31.

(d) Nilambur Valley Forests.

127. Three lakhs twelve thousand four hundred and nine cubic feet of timber was extracted against 418,016 cubic feet in the previous year. The output comprised 156,730 cubic feet from the plantations and 155,679 cubic feet from the natural forest.

There was a slight reduction in the cost of production in both ranges.

128. Sales in the forest amounted to 99,871 cubic feet of teak at an average rate of Rs. 1–4–1 per cubic foot as against 88,280 cubic feet sold at Re. 0–9–8 per cubic foot in the previous year; and 61,821 cubic feet of other species at an average rate of Re. 0–8–3 per cubic foot as against 31,902 cubic feet sold at Re. 0–5–5 per cubic foot in 1930–31. The total sales in the forest amounted to 161,692 cubic feet at an all round average rate of Re. 0–15–7 per cubic foot as against 120,182 cubic feet sold at Re. 0–8–6 per cubic foot in the previous year; the profit on

the sales in the forest increased from Rs. 41,026 to Rs. 84,157. A better class of timber was sold up river than previously and the rates obtained were abnormally good, largely for the reason that a contract had been entered into for a large proportion of the Beypore stocks and the merchants were short of teak. This contract fell through and traders have found it difficult to dispose of what they bought without loss.

129. The quantity floated to Beypore was 187,137 cubic feet against 356,448 cubic feet in 1930–31. Sales at the depot comprised 94,595 cubic feet of teak at an average rate of Rs. 1–8–6 per cubic foot as against 160,766 cubic feet sold at Re. 1–4–2 per cubic foot in the previous year; and 111,593 cubic feet of other species at an average rate of Re. 0–11–10 per cubic foot as against 149,684 cubic feet sold at Re. 0–12–9 per cubic foot in 1930–31. The total sales in the depot thus amounted to 206,188 cubic feet against 310,450 cubic feet in 1930–31 and, on account of the better prices realized for teak, the all round average rate for all species increased from Re. 1–0–7 to Re. 1–1–8 per cubic foot.

130. For the concern as a whole, the sales of teak, during the year, amounted to 194,466 cubic feet at an average rate of Re. 1–6–3 per cubic foot as against 249,046 cubic feet sold at Re. 1–0–5 per cubic foot in the previous year; while sales of the other species amounted to 173,414 cubic feet at an average rate of Re. 0–10–6 per cubic foot as against 181,586 cubic feet sold at Re. 0–11–6 per cubic foot in 1930–31. In all, a quantity of 367,880 cubic feet was sold at an all-round average rate of Re. 1–0–9 per cubic foot as against 430,632 cubic feet sold at Re. 0–14–4 per cubic foot in the previous year.

131. Sleeper operations continued during the year, and 3,211 broad gauge and 7,907 metre gauge sleepers were supplied to the railways against 3,809 broad gauge and 12,845 metre gauge sleepers in the previous year.

132. A quantity of 13,122 cubic feet of the old mill-sawn scantlings was disposed of against 9,539 cubic feet in the previous year. Owing, chiefly, to the degrade in the stocks and the depression in the market, the average rate dropped from Rs. 2–2–9 in 1930–31 to Rs. 1–9–8 per cubic foot. The loss on sawn timber sales amounted to Rs. 3,594 against Rs. 2,426 in 1930–31. These old stocks are now nearly fully disposed of.

133. The year's work resulted in a profit of Rs. 1,93,057 against Rs. 1,85,509 for 1930–31.

134. Since the close of the year, the saw mill machinery at Beypore has been sold.

(*e*) *Wynaad Forests.*

135. During the year, extraction in the Begur, Chedleth and Sultan's Battery ranges was restricted to 81,728 cubic feet against 328,454 cubic feet in 1930–31. A quantity of 66,237 cubic feet was carted to sale depots against 208,355 cubic feet in the previous year.

136. The cost of production at sale depots varied according to supplying centres and the sale depot used from Re. 0–13–3 to Re. 1 per cubic foot compared with rates of from Re. 0–14–8 to Re. 1–4–4 in 1930–31.

137. Sales in the forest depots increased from 48,006 cubic feet in 1930–31 to 69,707 cubic feet but the average rate obtained fell from Re. 0–5–5 to Re. 0–4–11 per cubic foot.

138. At the Nanjangud depot 17,933 cubic feet were sold at an average rate of Rs. 1–14–6 per cubic foot as against 32,018 cubic feet sold at Rs. 2–6–7 per cubic foot in the previous year. Thirty-one thousand five hundred and twenty-four cubic feet were sold at the Mysore depot against 47,770 cubic feet in the previous year. The rate obtained dropped from Rs. 2–5–0 per cubic foot in 1930–31 to Rs. 1–11–11 per cubic foot.

139. A quantity of 8,029 cubic feet of the balance of the old mill sawn scantlings was sold at an average rate of Rs. 1–12–3 per cubic foot as against 18,679 cubic feet sold at Rs. 2–8–7 per cubic foot in the previous year.

140. No consignments were sent to the overseas market, but out of the old stock of 2,843 cubic feet sent in previous years, 739 cubic feet were sold for Rs. 1,043 resulting in a net realization of Rs. 38. The balance of 2,104 cubic feet was sold after the close of the year.

141. Sleeper operations continued in the Kannoth range and 2,733 broad gauge and 2,444 metre gauge sleepers were supplied to the railways as against 3,235 broad gauge and 3,154 metre gauge sleepers in 1930–31.

142. The compilation of the accounts of the division on commercial lines undertaken by the commercial auditors in previous years was discontinued from the year under review.

(*f*) *The Forest Utilization Division.*

143. The Forest Utilization Officer continued to organize and conduct sales of logs, sawn scantlings, and sleepers.

144. The turnover of the division, for the year, was Rs. 7,94,020 against Rs. 12,42,861 in the previous year, the decline being due to the depression in the timber market.

145. A quantity of 39,153 cubic feet of mill sawn scantlings obtained before the mills were closed, was sold, leaving a balance of 15,296 cubic feet practically the whole of which has been disposed of since the close of the year. Rupees 2–4–1 per cubic foot was realized for teak and Re. 1–0–9 for other species as against Rs. 2–15–1 and Re. 1–3–9 per cubic foot in the previous year; the decline being due to degrade, to adverse market conditions and to the most popular sizes having already been disposed of.

146. *Overseas trade.*—No consignment was made during the year. Of the old stock of 3,517 cubic feet in London, the entire stock of rosewood amounting to 760 cubic feet was sold for Rs. 290 and 653 cubic feet of laurel was sold for Rs. 996, the net realization on the sales being Rs. 127. A balance of 2,104 cubic feet—entirely laurel—was left unsold at the end of the year and this has subsequently been sold. No timber is now sent overseas except against definite orders: there has been a certain amount of enquiry from the Timber Adviser to the High Commissioner for timber and rates showing a bare margin of profit have been quoted him, but no business has resulted.

147. The sales of logs at the Pollachi, Beypore, Mysore and Nanjangud depots, during the year amounted to 143,053 cubic feet of teak at an average rate of Rs. 1–12–2 per cubic foot as against 264,427 cubic feet sold at Rs. 1–11–3 per cubic foot in the previous year; and 153,567 cubic feet of species other than teak at an average rate of Re. 0–13–3 per cubic foot as against 216,845 cubic feet sold at Re. 0–14–3 per cubic foot in 1930–31. In all, 296,620 cubic feet were sold from the depots at an all-round average rate of Re. 1–4–5 per cubic foot as against 481,272 cubic feet sold at Re. 1–5–5 per cubic foot in 1930–31.

148. **Sleepers.**—The Forest Utilization Officer continued to pass sleepers for the railways: 35,764 broad gauge and 20,974 metre gauge sleepers were supplied, in addition to 8,538 metre gauge sleepers against the requirements for 1932, as against 35,000 broad gauge, 50,000 metre gauge and 2,600 narrow gauge sleepers supplied in 1930–31. The rates paid by the railways for the 1931–32 supply were Rs. 7–12–0 per broad gauge and Rs. 3–2–0 per metre gauge sleeper as against Rs. 8–4–0 per Mesua and Hopea broad gauge and Rs. 8 per Irul broad gauge sleeper and Rs. 3 per metre gauge sleeper in the previous year. Due to the decrease in the number of sleepers supplied and to the lower rate for broad gauge sleepers, the revenue from this source decreased from Rs. 4,79,062 in 1930–31 to Rs. 3,73,953.

149. The department was fortunate in obtaining for sleeper supplies up to the end of the current calendar year the rates paid last year and it is to be feared that a reduction in the near future is inevitable. Private suppliers make absurdly low quotations, often without supplies of timber, and it is on these the rates are based. Further such people have no overhead charges and are able to produce at a cost considerably lower than Government must incur. It is true that the railways make some allowance for the department's guarantee of species and for the excellence of their sleepers, but if rates decline further certain centres of production will cease to be remunerative.

150. The Forest Utilization Officer continued to arrange for the supply of specimens of timbers for tests at the Forest Research Institute, Dehra Dun. He also made a joint inspection with representatives of the railway of the treated and untreated sleepers, laid in the line experimentally.

151. The market for spokes and felloes was investigated and revised specifications for the quality in demand were sent to the production centre.

152. Samples of Malabar-grown mahogany tested at the Forest Products Laboratory, Princes Risborough, have been favourably reported on.

153. A lease on very easy terms for the extraction of match woods in Godavari, to be worked up at Rajahmundry and which has been pending execution for some time has unfortunately fallen through, the company and its promoters having disappeared.

154. Information regarding important Indian markets for local timbers, is kept up to date. Efforts have again been made to have Madras

timber specified for use against the requirements of other departments of Government. It is satisfactory to be able to record that the two railways of Southern India are using a greater proportion of Indian teak and also of other species, while it is of interest to note the striking decline in the quantity of timber used by the railways of India—from a value of Rs. 109 lakhs in 1929–30 to Rs. 38 lakhs in 1931–32.

155. **Minor Forest Products.**—The market for minor forest products remained dull; the increased import of wattle bark coupled with the depression in the market for tanned hides adversely affected the sale of the tan stuffs.

VI.—FINANCE.

156. The total revenue, excluding the results of Government Commercial Undertakings, Nilambur and Mount Stuart, amounted to Rs. 39·95 lakhs, the expenditure being Rs. 39·87 lakhs, the reductions as compared with the last year's figures being Rs. 7·63 lakhs and Rs. 3·17 lakhs respectively. The cash surplus was Rs. 0·08 lakh, or, adding the profits on the so-styled Commercial Undertakings, Rs. 2·68 lakhs, compared with Rs. 7·14 lakhs in the previous year. (The figure of Rs. 4·30 lakhs quoted in the last year's report was corrected on receipt of the finally audited figures.)

157. There was an increase in the revenue from sandalwood due to the sale of a larger quantity and to better prices realized, though the full revenue was not realized in the year under report. The total revenue from forest produce removed by Government Agency decreased by Rs. 3·13 lakhs, the main decrease being under timber (Rs. 3·53 lakhs). Revenue from produce removed by consumers and purchasers decreased by Rs. 3·31 lakhs due to want of demand and lower prices realized for bamboo coupes, to the failure of the tamarind crop in Rampa and North Salem and to failure to sell tanning barks in Guntur and Nellore. There was also a decrease of Rs. 0·35 lakh in grazing revenue due to causes which have not yet been completely established.

158. Expenditure on works decreased by Rs. 1·72 lakhs due to the abandonment or postponement of works on account of financial stringency. There was also a reduction in expenditure of Rs. 1·28 lakhs on pay and allowances due to the emergency cut in salaries, reduction in the rates of travelling and other compensatory allowances and economy in contingent expenditure.

159. The following trading account exhibits the financial position of the department for the year and shows the net profit to be Rs.0·26 lakh. Interest charges are not actually incurred and the figure of outstanding revenue for the year under report is not strictly correct as, although sales had been effected, a considerable part of the sale amount for sandal did not fall due until after the close of the year. The financial position is thus a good deal better than that disclosed by the account. No credit is taken for free grants or grants at concessional rates for grazing and other produce: the amount so foregone amounted to Rs. 1,34,774.

I. Trading Account.

	LAKHS. RS.		LAKHS. RS.
Value of timber, etc., in depots on 31st March 1931.	8·43	Value of timber, etc., in depots on 1st April 1932.	6·35
Value of tools and plant on 31st March 1931.	10·45	Value of tools and plant on 1st April 1932.	9·10
Revenue outstandings on 31st March 1931.	7·87	Revenue outstandings on 1st April 1932.	8 64
Working expenditure of the year (excluding capital expenditure).	36·91	Revenue of the year	39·95
Good debts (advances) on 31st March 1931.	0·25	Profits on commercial undertakings (as below).	2·60
Gross profit	2·90	Good debts (advances) on 1st April 1932.	0·17
Total ..	66·81		66·81

II. Interest.

	LAKHS. RS.
(1) Capital expenditure up to the end of 1930–31 (excluding commercial concerns)	36·57
Capital expenditure during 1931–32	2·95
	39·52
(2) Interest on capital expenditure during 1931–32, at 5·52 per cent	2·18

III. Depreciation.

(3) Depreciation on tools and plant at 5 per cent	0·46

IV. Profit and Loss Account.

Gross profit as per Table I	2·90
Deduct interest and depreciation (2·18 plus 0·46) ...	2·64
Net profit ...	0·26

The profits on the year's working of the commercial concerns were—

	RS.
Mount Stuart	17,127
Nilambur	2,43,077

VII.—GENERAL.

160. The department as usual showed every consideration to hillmen and other jungle tribes by the grant of rent-free leases for cultivation and free or preferential terms in the matter of grazing and the use of forest produce. They were provided with labour as elephant attendants and for the ordinary work of the department, while use was made of their predilection for shifting cultivation by the formation of plantations by

this means, all work done in connexion with the raising of the tree crop being paid for. This method, the use of which is extended wherever possible, is not without disadvantages but results in some economy, the saving on the cost of formation being as much as Rs. 20 an acre in some cases.

161. There was no trouble whatever with any of the forest dwellers and selection for reservation in the Balliguda and Rampa Agencies was not resented. It is the lower subordinate that is feared and it is hoped that it will be possible, except where definite works are in progress, to eliminate the guard and watcher altogether in these regions, the work of protection and boundary maintenance being left to the headmen who will be rewarded for these services. But as this system may break down at any time it will be necessary to have sanction for the appropriate number of subordinate posts so that appointment to them may be made directly the need for it arises.

162. There has long been abuse of the arrangement whereby, in the Godavaris, the local people are paid rewards if fire-protection is successful. ' Success ' has been used in too elastic a manner, and it is hoped that the Conservator is now alive to the necessity for the exercise of greater care in this matter.

163. The savings deposited in the Savings Bank by the Yenadis of Sriharikota Island in Nellore now amount to an appreciable sum. A suggestion to employ certain of the controlled criminal classes on casuarina planting in this region is under consideration: the settlement would be self-supporting and it is hoped that the result of the investigation may show that such a work will prove profitable to Government, while increasing the fuel supply of Madras.

164. A survey of the position of the Chenchus, in Kurnool, disclosed the fact that there are now in occupation areas not admitted at forest settlement, while the number of cattle of all classes which they were permitted to keep has been varied. A satisfactory adjustment of these matters has been effected. Rupees 26,470, a little less than last year, was spent on the Chenchus; their adoption of agricultural pursuits, which is encouraged by the grant of loans for the purchase of plough-cattle, proceeds very slowly. Medical charges to the extent of Re. 1-3-2 per head were incurred in the interests of these people, the figure for the whole population of the Presidency, including the Chenchus, being Re. 0-9-2.

165. The Forest Department continued to carry out the Land Revenue administration of the Javadis as satisfactorily as usual. It is desirable to extend this, but anything of the kind is out of the question until the unwieldy Vellore charge is divided into two.

166. A forester in North Cuddapah was murdered in the discharge of his duties, one of the accused was sentenced to death and the others to five years' rigorous imprisonment. An extraordinary pension was granted to the forester's family. Two guards in the Madura division were murdered while on duty and two of the accused were sentenced to five years' rigorous imprisonment.

167. The health of the subordinates shows little or no improvement, though the steps taken to ensure that the surroundings of residential buildings be kept in a sanitary condition cannot fail to have effect. But there is too fatalistic an attitude adopted in respect of malaria, the cause of much money and efficiency loss, whereas simple and well-known precautions might be taken. Four rangers, five foresters and twenty-seven guards died in the course of the year.

168. The ranger position is becoming acute: an inadequate leave reserve being aggravated by delay in taking the decision to resume training at the Forest College has already resulted in a shortage of trained men and the position cannot be recovered for some years.

169. A feature of the year was the decision to abandon the long-standing practice under which the District Forest office establishments were appointed by Collectors, the clerks being borne on the general list. It has been necessary to devise a new organization comprising the whole of the clerks of the department and so to adjust scales of pay as to allow of transfers and promotions among all the different offices, while also taking into account the loss of opportunities for advancement hitherto available to the clerical staff of District Forest offices. The orders of Government are awaited.

170. The matter of game preservation is receiving increased attention; but in spite of the admonitions issued from time to time it is to be feared that the majority of present-day officers evince little interest and fail to recognize that this is a part of their duty and that of their subordinates, over whom they appear to exercise little control in this regard. The Chief Conservator was concerned to discover recently the extent to which the numbers of ibex in the Tinnevelly division have been reduced and was even more concerned by the failure of the District Forest Officer to realize that poaching is responsible. Admittedly an increase in the number of licensed weapons makes poaching more difficult to contend with, but such offences are not difficult to detect. Recent rulings on the subject of the regulation of shooting have put forest officers in a somewhat invidious position, a matter on which a representation will be made separately, but they must not forget that they are the agents for the check of illicit practice and to ensure that the regulations are observed. It is also clear that little is done to obtain correct records of what is shot by licence-holders. Thus it is seen that, excepting in the Nilgiris, 636 licences were issued in the last two years and that only 27 sambhur, 20 bison, 49 panther, 24 tiger, 9 bear, 23 chital, 8 muntjac, 5 ibex and 1 blackbuck are recorded as having been shot—a total of 166 head as compared with 204 head shot in the Nilgiris alone in the same period.

171. Proposals are pending with Government for the constitution of certain areas as game preserves, not closed sanctuaries in which nothing may be shot, for it is not believed that there is any need for these or that they would prove other than happy hunting grounds for poachers, but areas of a type essential as the habitat of certain kinds of animal and which appear specially vulnerable to alienation. No area seems suitable as a national park, as access by an appreciable part of the public would not be possible—this is unfortunate as it is desirable that interest in the

fauna of the country and some public opinion on the necessity for its preservation be created.

172. All the Forest Divisional offices were inspected by the audit branch of the Accountant-General's office except those in the Second Circle. All range offices were inspected by District Forest Officers and all District Forest offices by Conservators.

173. All ranks of the department maintained their keenness and the work of a number of officers and subordinates was beyond all praise. After five years' control of the department the writer of this report desires to place on record the gratitude he feels for the very loyal support he has received throughout that period.

R. D. RICHMOND,
Chief Conservator of Forests.

APPEN

Appendix A.—Comparative statement of number and origin

District.	A. Fires caused by accident or through carelessness in burning fire lines.		B. Fires entering forests by crossing exterior fire lines.		C. Fires beginning inside the forests. Owing to carelessness or accident. By workmen engaged in the forests or by purchasers of forest produce and by hay-cutters.		By villagers, travellers, etc., passing through the forests.		By railway engines.		By lightning or by fire balloons.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
First Circle.												
Ganjam	..	..	6	241	..	..	28	2,917	..	..	1	82
Vizagapatam ..	..	..	5	58	1	5	14	198	..	..	..	..
Godavari, Upper.	..	..	4	37,920	..	..	7	27,674	..	..	..	..
Do. Lower.	..	..	6	5,919	12	635	32	4,836	..	..	..	..
Guntur	..	..	1	90	2	150	11	1,406	..	..	..	..
Nellore	1	600	1	50	1	700	12	2,905	..	..	..	..
Total ..	1	600	23	44,278	16	1,490	104	39,936	..	..	1	82
Second Circle.												
Anantapur ..	13	7,790	7	1,880	7	6,126	26	7,835	4	2,460	..	..
Kurnool, East ..	..	..	4	6,252	..	..	1	1,471	..	..	..	..
Do. South ..	..	..	..	..	2	104	4	796	..	..	..	..
Do. West ..	1	15	4	925	..	..	36	15,920	1	150	..	..
Cuddapah, North.	..	..	28	51,340	..	..	12	9,640	..	..	..	..
Do South.	2	110	5	4,105	9	3,082	20	5,559	1	13	..	..
Total ..	16	7,915	48	64,502	18	9,312	99	41,221	6	2,623	..	..
Fourth Circle.												
Chittoor	..	..	2	410	..	..	..	..	..	..	..	..
Vellore	..	..	3	285	..	..	38	5,494	3	1	..	..
Salem, North ..	..	..	3	334	..	..	14	3,898	..	..	..	..
Do. Central ..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	8	1,029	..	..	52	9,392	3	1	..	..
Fifth Circle.												
Kollegal	2	540	10	3,725	1	75	21	8,680	..	..	..	..
North Coimbatore	..	..	4	1,190	..	..	30	2,486	..	..	..	..
South do.	4	469	2	670	1	100	16	1,440	..	..	..	..
Madura	2	10	10	1,158	2	439	9	1,059	..	..	..	..
Tinnevelly ..	..	..	34	920	46	2,375	12	210	..	..	..	..
Total .	8	1,019	60	7,663	50	2,989	88	13,875	..	..	..	..

DICES.

of fires that occurred during the calendar year 1931.

reserves or fire-traced areas.

By intentional firing.

In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.		Total of C.		Causes unknown.		Total of A, B and C and causes unknown.	
Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
1	330	..	..	..	..	30	3,329	9	434	45	4,004
..	..	..	..	..	..	15	203	..	..	20	261
9	21,900	5	20,921	..	..	21	70,495	13	28,114	38	136,529
..	..	..	..	..	..	44	5,471	28	4,083	78	15,473
..	..	..	..	..	..	13	1,556	4	172	18	1,818
11	587	1	600	..	..	25	4,792	3	102	30	5,544
21	22,817	6	21,521	..	..	148	85,846	57	32,905	229	163,629
48	26,067	..	..	..	..	85	42,488	6	1,480	111	53,638
5	3,634	..	..	4	1,348	10	6,453	..	..	14	12,705
1	158	..	..	2	21	9	1,079	..	..	9	1,079
..	..	..	..	..	..	37	16,070	19	6,859	61	23,869
50	90,536	..	..	13	12,155	75	112,331	11	8,375	114	172,046
26	11,168	4	276	20	7,662	80	27,760	12	3,081	99	35,056
130	131,563	4	276	39	21,186	296	206,181	48	19,795	408	298,393
33	3,355	..	..	..	..	33	3,355	23	3,845	58	7,610
81	10,207	..	..	..	..	122	15,702	51	3,421	176	19,408
5	3,000	..	..	..	..	19	6,898	52	19,940	74	27,172
..	..	..	..	..	..	..	..	93	6,954	93	6,954
..	..	..	..	..	..	..	..	76	3,573	76	3,573
119	16,562	..	..	..	..	174	25,955	295	37,733	477	64,717
40	18,218	..	..	2	165	64	27,138	79	22,768	155	54,171
29	4,760	..	..	1	50	60	7,296	67	9,609	131	18,095
10	263	..	..	..	..	27	1,803	5	2,100	38	5,042
9	1,310	..	..	1	15	21	2,823	85	2,555	118	6,546
..	..	1	60	50	8,041	109	10,686	7	490	150	12,096
88	24,551	1	60	54	8,271	281	49,746	243	37,522	592	96,950

APPEN

APPENDIX A.—Comparative statement of number and origin

District.	A. Fires caused by accident or through carelessness in burning fire lines.		B. Fires entering forests by crossing exterior fire lines.		C. Fires beginning inside the							
					Owing to carelessness or accident.							
					By workmen engaged in the forests or by purchasers of forest produce and by hay-cutters.		By villagers, travellers, etc., passing through the forests.		By railway engines.		By lightning or by fire balloons.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Sixth Circle.												
Mangalore, North ..	3	97	..	..	..	..	45	904	..	..	..	..
Mangalore, South ..	3	23	25	327	2	71	28	861	..	..	..	..
Wynad ..	2	3	3	520	..	..	..	..	..	..	..	..
Nilambur ..	2	3	1	2	..	..	..	..	..	..	..	..
The Nilgiris ..	1	210	3	259	..	..	2	60	..	..	..	..
Palghat ..	4	389	3	445	2	45	2	38	..	..	..	..
Total ..	16	725	40	1,553	4	116	77	1,863	..	..	..	..
Parlakimedi Malihs ..	..	..	..	..	..	..	2	33	..	..	..	..
Grand Total, Presidency ..	40	10,259	179	119,025	88	13,907	422	106,320	9	2,624	1	82

DICES—*cont.*

of fires that occurred during the calendar year 1931—*cont.*

reserves or fire-traced areas.

By intentional firing.											
In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.		Total of C.		Causes unknown.		Total of A, B and C and causes unknown.	
Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
3	416	1	40	13	653	62	2,013	11	262	76	2,372
..	..	12	260	9	159	51	1,351	60	1,917	139	3,618
..	..	..	..	..	..	..	..	9	386	14	909
..	..	..	..	..	..	..	..	..	..	3	5
..	..	..	..	..	..	2	60	54	1,581	66	2,110
7	343	..	..	..	..	11	426	13	1,378	31	2,638
10	759	13	300	22	812	126	3,850	147	5,524	328	11,652
..	..	..	..	..	..	2	33	21	1,404	23	1,437
368	196,252	24	22,167	115	30,269	1,027	371,611	811	134,883	2,057	635,778

APPENDIX B.—Comparative statement of impounded cattle during 1931–32.

District.	Number of cattle impounded. 1930–31.	1931–32.	Average for three years ending 1930–31.
First Circle.			
Ganjam	1,036	2,746	1,417
Vizagapatam	166	167	259
Godavari, Upper	555	1,029	303
Do. Lower	1,459	1,917	1,289
Guntur	3,565	5,911	4,497
Nellore	1,513	1,733	1,539
Total	8,294	12,803	9,304
Second Circle.			
Anantapur	7,265	8,914	6,293
Kurnool, East	3,923	5,083	2,513
Do. South	6,156	6,689	6,667
Do West	3,889	6,689	5,246
Cuddapah, North	3,035	4,673	2,714
Do. South	4,082	3,118	3,409
Total	28,350	35,166	26,842
Fourth Circle.			
Chittoor	2,534	3,374	2,414
Vellore	4,978	5,675	5,304
Salem, North	1,188	1,898	1,336
Do. Central	2,101	2,934	2,366
Do. South	773	915	991
Total	11,574	14,696	12,411
Fifth Circle.			
Kollegal	1,796	2,626	2,151
Coimbatore, North	3,311	3,553	2,253
Do. South	81	611	184
Madura	2,560	2,555	3,116
Tinnevelly	1,706	2,295	1,528
Total	9,454	11,640	9,232
Sixth Circle.			
Mangalore, North	221	229	190
Do. South	285	285	250
Wynaad	156	176	184
Nilambur	23	274	99
The Nilgiris	601	780	645
Palghat	124	321	217
Total	1,410	2,065	1,585
Parlakimedi Maliahs	..	..	..
Grand Total, Presidency	59,082	76,370	59,374

ANNUAL FORM No. 25.

Forest Department, Madras Presidency.

Areas of Reserved Forests and Reserved Lands during 1931-32.

ANNUAL

Forest Department,

Areas of Reserved Forests and

Districts.	Area on 1st April 1931.		Added during the year.	Excluded during the year.	Area on 31st March	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent Class I or departmental forests.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
First Circle.						
Ganjam	400,043	625	(*d*) 63	(*e*) 20 (*i*) 17	400,069	625
Vizagapatam	196,547	307	..	(*e*) 230	196,317	274
Godavari, Upper ..	531,213	830	..	..	531,213	830
Do. Lower ..	365,427	571	..	..	365,427	491
Guntur	578,786	904	(*f*) 97	(*e*) 2 (*g*) 7	578,874	612
Nellore	475,877	744	..	(*e*) 186	475,691	372
Total ..	2,547,892	3,981	160	462	2,547,591	3,204
Second Circle.						
Anantapur	1,146,122	1,791	..	(*a*) 377 (*b*) 67	1,145,678 (*g*)	577
Kurnool, East ..	625,610	978	..	..	625,610	945
Do. South ..	462,064	722	(*c*) 240	..	462,304	665
Do. West ..	604,021	944	..	..	604,021	854
Cuddapah, North ..	505,844	790	(*d*) 44	..	505,888	758
Do. South ..	440,978	689	..	..	440,978	671
Total ..	3,784,639	5,914	284	444	3,784,479	4,470

First Circle—

(*a*) Leased forests.
(*b*) Notified under section 26 of the Madras Forest Act.
(*c*) Notified under section 4 of Madras Forest Act.
(*d*) Adoption of the correct area for the Pudringi reserve with reference to the area noted in the Survey of India map.
(*e*) Disafforested under section 24 of the Madras Forest Act.
(*f*) Adoption of the correct areas for the Gudimetla, Jaggayyapeta Block III and Jaggayyapeta Extension IV Reserves as per Kistna Collector's Proceedings No. A-6-1950-P.C., dated 1st December 1931.
(*g*) Adoption of the correct area for the Tadepalli reserve as per Guntur District Forest Officer's report.
(*h*) Deleted as the area was notified under section 26.
(*i*) Adoption of correct area for the Ambojora reserve.

FOREST DEPARTMENT

FORM No. 25.

Madras Presidency.

Reserved Lands during 1931–32.

Forests.		Area of Reserved Lands.						Total area of reserved forests and reserved lands in square miles.
1932.		Area on 1st April 1931.		Added during the year.	Exoluded during the year.	Area on 31st March 1932.		
in square miles.								
Class III or ryots. forests.	Total.	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
..	625	..	..	..	..	..	..	625
33	307	(*a*) 1,313 (*b*) 14	2	(*c*) 29	..	(*a*) 1,313 (*b*) 14 (*c*) 29	2	309
..	830	11,853	19	(*c*) 22,367	..	34,220	54	884
80	571	25,964	40	(*c*) 38,318	..	64,282	100	671
292	904	(*h*) 381	(*h*) 1	..	..	..	..	904
371	743	..	..	..	..	..	..	743
776	3,980	39,144	62	60,714	..	99,858	157	4,136
(*h*)1,213	1,790	19,499	30	(*e*) 3,651	..	23,150	36	1,826
33	978	..	..	(*f*) 168	..	168	..	978
57	722	..	..	..	..	..	..	722
90	944	1,863	3	(*e*) 1,926	..	3,789	6	950
32	790	..	..	..	..	..	..	790
18	689	..	..	..	..	..	..	689
1,443	5,913	21,362	33	5,745	..	27,107	42	5,955

Second Circle—

(*a*) Area disafforested under section 24 of the Forest Act in panchayat reserves.

(*b*) Area disafforested in a previous year in Tummala Reserved Forest was not taken into account, hence now deducted.

(*c*) 240 acres added in Kanigiri Range due to adopting incorrect area for Musunur Reserved Forest (Panchayat Forest) in previous years.

(*d*) 44 acres in Kanoherlamoram Reserved Forest (Panchayat) were wrongly exoluded last year, hence now included.

(*e*) Areas declared as "Reserved Lands" by the respective Collectors of Anantapur, Cuddapah and Kurnool under section 26 of the Forest Act.

(*f*) Notified under section 4 of the Madras Forest Act.

(*g*) (*h*) Increase under (*g*) and decrease under (*h*) are due to the transfer of (1) Madanikonda Reserved Forest from Class III to Class I and (2) a portion of Banavasi Reserved Forest from Class I to Class III and to the disafforestation of some areas in panchayat reserves.

Areas of Reserved Forests and

Districts.	Area on 1st April 1931.		Added during the year.	Excluded during the year.	Area on 31st March	Area of Reserved Equivalent
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Class I or Departmental forests.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fourth Circle.						
Chittoor	503,261	786	..	(a) 0·54	503,260	578
Vellore	714,191	1,116	..	(b) 332	713,859	705
Salem, North ..	369,686	578	..	..	369,686	567
Do. Central ..	603,739	943	(c) 86	(d) 387	603,438	713
Do. South	263,191	411	..	(e) 10	263,181	256
Total ..	2,454,068	3,834	86	729·54	2,453,424	2,819
Fifth Circle.						
Kollegal	605,830	947	..	(f) 2,741	603,089	942
Coimbatore, North ..	558,100	872	..	..	(a) 558,100	832
Do. South ..	250,508	(i) 391	..	(g) 253	(b) 250,255	386
Madura	437,245	683	..	(f) 2	(c) 437,243	647
Tinnevelly	267,156	417	..	..	(d) 267,156	407
Tanjore	6,468	10	..	..	(e) 6,468	6
Total ..	2,125,307	3,320	..	2,996	2,122,311	3,220
Sixth Circle.						
Mangalore, North ..	229,896	359	..	..	229,896	359
Do. South ..	280,658	438	(a) 521·53	(b) 36·72	281,043	439
Wynaad	168,111	263	..	(b) 112·00	167,999	262
Nilambur	68,822	108	..	..	68,822	108
Palghat	167,898	262	..	..	167,898	252
The Nilgiris	309,743	484	..	(b) 12·27	309,730	484
Total ..	1,225,028	1,914	521·53	160·99	1,225,388	1,904
Parlakimedi Maliahs.	..	..	..	..	..	..
Grand Total, Presidency ..	12,136,935	18,968	1,051·53	4,775·53	12,133,210	15,617

Fourth Circle—

(a) 54 cents disreserved in Mahimandala Reserved Forest (panchayat) in Notification No. 459, dated 16th April 1931.

(b) Exclusion of 332 acres from the total area for the district due to wrong totalling of the areas of individual reserves.

(c) Addition of 86 acres to the total area for the district due to increased area for Mallapuram Reserved Forest in previous years as per actual survey.

(d) 122 acres disreserved in Karuvattuparai Reserved Forest in Notification No. 275, dated 28th July 1931 ; 124 acres disreserved in Mallapuram Reserved Forest in Notification No. 258, dated 10th July 1931 ; 105 acres disreserved in Mallapuram Extension Reserve Forest in Notification No. 259, dated 10th July 1931 ; and 36 acres less in Mallapuram Extension Reserved Forest as per actual survey.

(e) 7·23 acres disreserved in Mallur Reserved Forest in Notification No. 414, dated 15th December 1931 and 2·77 acres due to rounding off the fractions in totalling.

Reserved Lands during 1931–32—*cont.*

Forests.		Area of Reserved Lands.						
1932.		Area on 1st April 1931.		Added during the year.	Excluded during the year.	Area on 31st March 1932.		Total area of reserved forests and reserved lands in square miles.
in square miles.								
Class III or ryots forests.	Total.	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
208	786	..	..	..	..	..	..	786
410	1,115	70	0·01	..	..	70	0·01	1,115
11	578	..	..	..	..	..	..	578
230	943	3,790	6	..	..	3,790	6	949
155	411	19,302	30	..	..	19,302	30	441
1,014	3,833	23,162	36	..	..	23,162	36	3,869
..	942	..	..	..	..	..	..	942
40	872	..	..	..	..	..	..	872
5	391	..	..	..	..	..	..	391
36	683	..	..	2	..	(*h*) 2	·024	683
10	417	..	..	..	..	..	..	417
4	10	(*f*) 5,992	9	..	..	5,992	9	19
95	3,315	5,992	9	2	..	5,994	9	3,324
..	359	..	..	..	..	..	..	359
..	439	5,960	9	(*c*) 128·70	(*d*) 886·34	5,203	8	447
..	262	22	..	..	..	22	..	262
..	108	11,510	18	..	..	11,510	18	126
10	262	..	..	..	..	..	..	262
..	484	1,210 (*f*) 2,865	2 ·5	..	(*e*) 45·90	1,210 (*f*) 2,819	2 5	491
10	1,914	21,567	34	128·70	932·24	20,764	33	1,947
..	..	112,895	176	..	16·23	112,879	176	176
3,338	18,955	224,122	350	66,589·70	948·47	289,764	453	19,408

Fifth Circle—

(*a*) Includes 20,644 acres of Palamalai reserve and additions in Mettur taluk and 25,702 acres of ryots' forests.

(*b*) Includes 3,470 acres of ryots' forests.

(*c*) Do. 23,739 do.

(*d*) Do. 6,578 do.

(*e*) Do. 2,823 do.

(*f*) Disreservation.

(*g*) Due to rectification of areas in Anamalai reserve.

(*h*) Afforestation.

(*i*) Includes 27 square miles of Tekkadi Leased Forests.

(*j*) Area notified under rule 5 of section 26 of the Forest Act V of 1882.

Sixth Circle—

(*a*) Area added under section 16.

(*b*) Area disforested under section 24.

(*c*) Difference in area added as per settlement notification under section 16 by the Forest Settlement Officer.

(*d*) This includes an area of 521·53 acres notified under section 16 and the balance being the area excluded at settlement, as finally notified under section 16 of the Act by the Forest Settlement Officer.

(*e*) Area transferred to Hydro-Electric Department, Glen Morgan Scheme, Pykara.

(*f*) Toda patta lands.

ANNUAL FORM NO. 28.

Forest Department, Madras Presidency.

Progress made in Working Plans during 1931-32.

District.	Areas for which Working Plans have been completed and approved by the Chief Conservator of Forests.		Areas for which Working Plans are being compiled or have been compiled but not sanctioned.		Areas for which Working Plans have still to be taken in hand.	Total forest area as per form 25.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
FIRST CIRCLE.	SQ. MLS.	SQ. MLS.	SQ. MLS.		SQ. MLS.	SQ. MLS.
Reserved Forests.						
Ganjam	625					625
Vizagapatam	219				88	307
Godavari, Upper					830	830
Do. Lower	393				178	571
Guntur	35		540		329	904
Nellore	80		39		624	743
Total	1,352		579		2,049	3,980
Reserved Lands.						
Vizagapatam					2	2
Godavari, Upper					54	54
Do. Lower					100	100
Guntur					1	1
Total					157	157
SECOND CIRCLE.						
Reserved Forests.						
Anantapur	(*a*) 574				(*g*)3+1,213(*j*)	1,790
Kurnool, East	894		(*c*) 51		33(*j*)	978
Do. South	613		(*d*) 9		(*h*) 43 +57(*j*)	722
Do. West		(*b*) 298	(*e*) 556		90(*j*)	944
Cuddapah, North	752				(*i*) 6 +32(*j*)	790
Do. South	113		(*f*) 558		15(*j*)	689
Total	2,946	298	1,174		1,495	5,913

Note for the First Circle.

NOTE.—A new working plan for the whole of Lower Godavari is now under progress by Working Plan Circle.

Note for Second Circle.

(*a*) Decreased area is due to transfer of 1,400 acres or 2·19 square miles of Banavasi Reserved Forest to Panchayats.

(*b*) During the year Yerramalais Revised Working Plan was sanctioned in Chief Conservator's Proceedings No. 424, Press, dated 3rd October 1931.

(*c*) Area of nine E.N. Block reserves which were transferred from class III to class I in 1930.

(*d*) A tentative Working scheme for 9 square miles in Nandyal Terai Block I (Gazulapalle) which was sanctioned by the Conservator is in force.

(*e*) Area of Nallamalai Working Plan pending sanction with the Chief Conservator of Forests.

(*f*) Working Plan for this area has been completed and is pending sanction.

(*g*) Area of Madhanikonda Reserved Forest transferred from class III to class I during the year.

(*h*) Area of Class I reserves of Kanigiri Range for which Working Plan is to be prepared.

(*i*) Area of Chennupalle Reserved Forest retained under Class I as no panchayat is yet formed for it.

(*j*) Area of panchayat reserves.

Progress made in Working Plans during 1931-32—*cont.*

District.	Areas for which Working Plans have been completed and approved by the Chief Conservator of Forests.		Areas for which Working Plans are being compiled or have been compiled but not sanctioned.		Areas for which Working Plans have still to be taken in hand.	Total forest area as per form 25.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
SECOND CIRCLE—*cont.*						
Reserved Lands.						
Anantapur	..	..	..	..	(*k*) 36	36
Kurnool, West ..	..	..	..	..	(*k*) 6	6
Total ..	..	..	..	..	42	42
Unclassed Forests.						
Anantapur	(*l*) 1	..	..	..	..	1
Total ..	1	..	..	..	..	1
FOURTH CIRCLE.						
Chittoor	577	..	..	..	(*b*) 208	786
	(*a*) 1					
Vellore	(*c*) 540	..	165	..	(*b*) 221	1,115
	(*a*) 189					
Salem, North ..	141	..	217	..	210	578
	(*a*) 5				(*b*) 5	
Do. Central ..	(*d*) 511	(*e*) 530	110	..	92	943
	(*a*) 111				(*b*) 119	
Do. South	211	(*f*) 286	44	..	(*b*) 118	411
	(*a*) 38					
Total ..	1,980	..	536	..	302	3,833
	(*a*) 344				(*b*) 671	(*g*) + 36
						3,869

Note for Second Circle.

(*k*) Area of "Reserved Lands" declared by the respective Collectors under section 26 of the Madras Forest Act and transferred to panchayat management during the year.

(*l*) Area of Garaga unreserve included in the sanctioned Working Plan of Anantapur Division.

Note for Fourth Circle.

(*a*) Ryots' forests.

(*b*) Ryots' forests. No Working Plans required.

(*c*) The difference of one square mile is due to wrong totalling of areas in individual reserves last year.

(*d*) The difference of 1 square mile is due to disreservation since last year.

(*e*) Five hundred and thirty square miles in column (3) is made up of 448 square miles in column (2) (including 21 square miles of Jalluthu and Godumalai but comprised in South Salem working plan) 74 square miles out of 110 in column 4 and 8 square miles of reserved lands and unreserves.

(*f*) Two hundred and eighty six square miles in column (3) includes figures 211 and 44 in columns (2) and (4) and besides 30 square miles of Reserved lands.

(*g*) Reserved lands.

Progress made in Working Plans during 1931-32—*cont.*

District.	Areas for which Working Plans have been completed and approved by the Chief Conservator of Forests.		Areas for which Working Plans are being compiled or have been compiled but not sanctioned.		Areas for which Working Plans have still to be taken in hand.	Total forest area as per form 25.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
FIFTH CIRCLE.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Kollegal	(a) 947 (b) 5	..	..	..	..	942
Coimbatore, North ..	50 (a) 267 (c) 212	..	..	..	.. 303 (e) 40	872
Do. South ..	85 (a) 2	30	..	1	268 (e) 5	391
Madura	368	..	17	..	261 (e) 37	683
Tinnevelly	(a) 287 (d) 17	..	..	..	103 (e) 10	417
Tanjore	10	..	..	..	..	10
Total ..	2,240	30	17	1	1,027	3,315 (f) + 9 3,324
SIXTH CIRCLE.		..				
Reserved Forests.						
Mangalore, North ..	(a) 42	..	..	(b) 317 + 42	.. ..	359
Do. South ..	(c) 7	..	(d) 431	..	(e) 1	439
Wynaad	158	..	104	..	..	262
Nilambur	108	..	..	..	..	108
The Nilgiris	159	..	..	..	325	484
Palghat	62	48	142	..	(f) 10	262
Total ..	536	48	677	359	336	1,914
Reserved Lands.						
Mangalore, South ..	..	..	..	..	(h) 8	(h) 8
The Nilgiris	..	..	..	..	(g) 7	7
Total ..	..	..	..	..	15	15

Note for Fifth Circle.

(a) Area of temporary schemes sanctioned by the Conservator of Forests.
(b) Disreserved.
(c) Area of lapsed Working Plan for extraction o dead sandalwood trees.
(d) Area of lapsed scheme, sanctioned by Chief Conservator, under revision.
(e) Area of ryots' forests.
(f) Reserved lands.

Note for Sixth Circle.

(a) Working scheme sanctioned for catechu area and for fuel areas.
(b) A regular Working Plan for the whole Division which was under preparation by the Working Plans Circle was completed during the year. The area shown in column 2 has also been included in this.
(c) This is covered by one working plan sanctioned by the Board of Revenue, two schemes sanctioned by the Chief Conservator of Forests, Madras, and one sanctioned by the Conservator.
(d) The Working Plan for this division which was under preparation by the Working Plans Circle was completed during the year.
(e) Area of Aletti East extension declared as Reserved Forest during the year (correct area is 0·81 square mile).
(f) Represents area under Panchayat management and portions of Bolampatty Blocks I and II.
(g) Toda patta lands and Badaga plantations scattered over the district.
(h) Revised area after settlement (last year's being 9 square miles).

Progress made in Working Plans during 1931-32—*cont.*

District.	Area for which Working Plans have been completed and approved by the Chief Conservator of Forests.		Areas for which Working Plans are being compiled or have been compiled but not sanctioned.		Areas for which Working Plans have still to be taken in hand.	Total forest area as per form 26.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SIXTH CIRCLE—*cont.*	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS	SQ. MLS.
Leased Forests.						
Nilambur	18	..	..	..	..	18
Grand total ..	564	48	677	359	351	1,947
Grand total, Presidency—						
Reserved Forests.	9,398	376	2,983	318	5,880	18,955
Reserved Lands..	1	..	..	..	214	453
Leased Forests ..	18	..	..	..	..	
Total ..	9,417	376	2,983	318	6,094	19,408

ANNUAL FORM No. 29.

Communications and Buildings during 1931-32.

Description.	Name of division.	At the commencement of the year. Number.	Length.	Capital cost.	Additions and exclusions during the year. Number.	Length.	Capital cost.	At the close of the year. Number.	Length.	Capital cost.	Repairs during the year. Number.	Length.	Capital cost.
	First Circle.		M. F. CH.	RS.		M. F. CH.	RS.		M. F. CH.	RS.		M. F. CH.	RS.
Roads and bridges including culverts.	Ganjam	25	102 3 6	67,165	6	(a) 1 0 8	2,545	31	102 3 6	69,710	22	71 4 5	2,771
	Vizagapatam ..	22	62 2 0	15,920	..	..	(b) 5	22	62 2 0	15,925	13	36 4 0	1,116
	Godavari, Upper.	21	173 3 4	31,601	..	0 4 6	947	21	174 0 0	32,548	9	51 0 5	424
	Do. Lower.	20	(c) 104 3 8	43,082	1	3 6 4	1,916	20	108 6 2	41,664	4	15 6 0	1,314
					— 1	— 5 4 0	— 3,334						
	Guntur	33	185 0 0	32,184	..	..	..	33	185 0 0	32,184	11	31 4 0	1,103
	Nellore	26	152 6 0	13,154	..	..	..	26	152 6 0	13,154	11	21 4 0	907
	Total ..	147	780 2 8	2,03,106	6	— 0 5 0	2,079	153	785 1 8	2,05,185	70	227 7 0	7,635
Buildings, residential and non-residential.	Ganjam	117	..	89,932	(d) —2	..	2,052	116	..	91,984	84	..	6,210
					+ 1								
	Vizagapatam ..	42	..	11,357	(d) —2	..	— 159	40	..	11,215	23	..	1,082
	Godavari, Upper.	80	..	75,145	1	..	84	79	..	75,030	49	..	2,814
	Do. Lower.	101	..	77,910	1	..	534	101	..	77,956	40	..	2,500
					— 1		— 488						
	Guntur	50	..	42,884	..	..	..	50	..	42,884	13	..	632
	Nellore	32	..	46,149	1	..	268	33	..	46,417	32	..	1,818
	Total ..	422	..	3,43,377	— 3	..	2,291	419	..	3,45,486	241	..	15,056

Other works.	Ganjam	25	..	4,753	..	..	..	25	..	4,753	14	..	154
	Vizagapatam	9	..	2,050	..	..	(c) 461	9	..	2,511	..	..	..
	Godavari, Upper.	19	..	16,239	..	..	..	19	..	16,239	10	..	46
	Do. Lower.	15	..	4,295	..	..	..	15	..	4,295	4	..	46
	Guntur	9	..	1,264	.2	..	45	11	..	1,309	2	..	110
	Nellore	15	..	2,110	1	..	35	16	..	2,145	15	..	54
	Total	92	..	30,711	3	..	541	95	..	31,252	45	..	410
	Second Circle.												
Roads and bridges including bridle-paths and culverts.	Anantapur	117	48 2 0	8,189	..	(a) + 0 0 2	(a) + 317	117	48 2 2	8,506	6	24 1 0	427
	Kurnool, East	54	322 7 0	65,053	..	..	+ 240	54	322 7 0	65,293	13	38 2 0	1,157
	Do. South	26	139 0 0	47,468	...	(a) ..	..	26	139 0 0	47,468	5	39 0 0	781
	Do. West	10	75 0 0	33,966	...	+ 2 0 5	+ 1,500	10	77 0 5	34,187	4	22 0 0	2,740
	Cuddapah, North	34	144 2 0	25,097	..	+ 1 3 0	(a) — 1,279 + 290	34	145 5 4	25,387	4	19 3 4	560
	Do. South.	36	189 2 0	45,871	+ 1	(a) + 0 0 4 + 3 1 0 (a) + 0 0 7	+ 400	37	192 3 7	46,271	8	40 7 0	1,841
	Total	277	918 5 0	2,25,644	+ 1	+ 6 5 8	+ 1,468	278	925 2 8	2,27,112	40	181 5 4	7,506
Buildings, residential and non-residential.	Anantapur	28	..	50,150	..	..	(b) — 1,329	28	..	48,821	17	..	884
	Kurnool, East	70	..	70,497	..	..	..	70	..	70,497	41	..	689
	Do. South.	58	..	1,00,767	(b) — 3	..	+ 46	55	..	1,00,813	29	..	1,030
	Do. West	90	..	1,30,434	— 1 (d) — 8	..	— 35 + 6,000	81	..	1,36,399	34	..	1,136
	Cuddapah, North.	52	..	81,667	— 4	..	— 645 + 1,080	48	..	82,102	12	..	687
	Do. South.	85	..	93,062	+ 1	..	+ 173	86	..	93,235	41	..	1,287
	Total	383	..	5,26,577	— 15	..	+ 5,290	368	..	5,31,867	174	..	5,713 *

Note for First Circle.—(a) This length was not taken into account as bad portions of Tilasangi-Tarasingi road were metalled.
(b) Represents amount spent for making a trial alignment from Busilikota to Kondasantha-Thadaparthi road.

(c) Represents the correct closing balance of last year. The figure 109 3 8 is a mistake for 104 3 8
(d) Written off.
(e) Deepening the existing well.

M. F. CH. M. F. CH.

* This exoludes pay of bungalow watchers.

Communications and Buildings during 1931-32—*cont.*

Description.	Name of division.	At the commencement of the year. Number.	Length.	Capital cost.	Additions and exclusions during the year. Number.	Length.	Capital cost.	At the close of the year. Number.	Length.	Capital cost.	Repairs during the year. Number.	Length.	Capital cost.
	Second Circle—cont.		M. F.	RS.		M. F.	RS. A.		M. F.	RS. A.		M. F.	RS. A.
Other works such as wells.	Anantapur ..	..	..	..	(*d*) + 16	..	(*d*) + 4,185 0	16	..	4,185 0	3	..	(*c*) 17 0
	Kurnool, East ..	22	..	7,391	..		..	22		7,391 0	2	..	28 0
	Do. South ..	13	..	9,052	..	..	..	13	..	9,052 0	2	..	193 0
	Do. West ..	10	..	9,095	(*c*) + 2		(*c*) + 1,600 0	12		10,695 0	..	..	..
	Cuddapah, North.	83	..	2,745	..	..	..	83	..	2,745 0	1	..	121 0
	Do. South.	15	..	5,139	..	..	..	15		5,139 0	..	..	..
	Total ..	143	..	33,422	+ 18	..	+ 5,785 0	161	..	39,207 0	8	..	359 0
	Fourth Circle.												
Roads including bridle-paths and culverts.	Chittoor	42	185 0	41,917	..	..	(*a*) 268 0	42	185 0	42,185 0	26	109 3½	3,315 0
	Vellore	35	174 0	1,11,096	1	2 6	(*a*) 703 0	36	176 6	1,11,799 0	21	127 0	4,049 0
	Salem, North ..	15	106 7	51,186	— 1	— 10 0	(*b*) — 5,220 0 (*a*) + 452 0	14	96 7	46,418 0	10	72 1	3,323 0
	Do. Central ..	15	73 5	16,534	..	..	(*a*) 41 6	15	73 5	16,575 6	4	25 6	343 6
	Do. South ..	34	151 5½	34,509	..	..	(*a*) 196 0	34	151 5½	34,705 0	24	57 1	1,562 6
	Total ..	141	691 1½	2,55,242	..	— 7 2	— 3,559 10	141	683 7½	2,51,682 6	85	391 3½	12,592 12
residential and residential.	Chittoor	81	..	89,635	..	..	..	81	..	89,635 0	46	..	2,712 0 (*c*) 985 0
												..	(*j*) 244 0
	Vellore	98	..	1,41,527	..	..	(*d*) + 1,671 0 (*e*) — 140 0	97	..	1,43,058 0	53	..	1,603 0 (*c*) 2,225 0
	Salem, North ..	42	..	77,016	— 1 ..	..	(*d*) + 345 0 (*f*) + 132 0 — 1,324 0	42	..	76,169 0	36	..	.822 0 (*c*) 276 0

Buildings, non-re	Salem, Central ..	93	..	82,477	+ 19	..	(g) + 935 0	92	..	83,462 0	26	..	2,589 0	
				(h) + 95	— 2		(e) — 45 0						(c) 1,069 0	
	Do. South ..	54	..	53,223	..	..	(d) 12 3	54	..	53,235 3	23	..	1,449 13	
													(c) 927 1	
	Total ..	368	...	4,48,973	— 2	..	+ 1,586 3	366	..	4,45,559 3	184	..	14,901 14	
Other works, such as wells, etc.	Chittoor	37	..	11,577	...	..	..	37	..	11,577 0	..	..	..	
	Vellore	62	..	5,743	+ 1	..	(i) + 195 0	63	..	5,938 0	5	..	57	
	Salem, North ..	19	..	4,723	..	..	..	19	..	4,723 0	2	..	16	
	Do. Central ..	27	..	2,551	..	..	..	27	..	2,551 0	5	..	64	
	Do. South ..	10	...	2,853	..	..	..	10	....	2,853 0	3	..	90	
	Total ..	155	..	27,447	+ 1	..	+ 195 0	156	..	27,642 0	15	..	227	
	Fifth Circle.													
	Kollegal ..	15	112 5	33,390	— 1	—17 0	(b) — 850	14	99 2	42,628	9	59 3	3,588	
						+ 3 5	(a) + 10,088 0			+ 100			— 100	
Roads including bridle-paths.							+ 100 0							
	Coimbatore, North	14	112 4	32,240	..	..	..	14	112 4	82,240	10	102 2	8,400	
	Do. South	16	58 6	2,76,122	..	(c) — 8 6	(d) + 35 0	16	51 2	3,77,945	11	41 7	(e) 17,333	
						+ 1 2	(a) + 1,01,683 0			— 105			+ 105	
	Madura	45	297 0	1,35,617	1	1 4	+ 93 0	46	298 4	1,35,710	10	290 5	9,541	
	Tinnevelly ..	64	192 1	72,996	..	0 4	+ 56 0	81	242 4	80,308	13	70 1	3,741	
					(a) 17	49 7	+ 7,256 0							
	Total	154	773 0	6,00,365	17	31 0	1,18,461 0	171	804 0	7,18,826	53	564 2	42,608	

Note for Second Circle.—

(a) Represents the differences between the closing balance and the opening balance, they are rectified in this column.

(b) Do. do.

(c) Do. do.

(d) The District Forest Officer, Anantapur, has furnished the total number of wells and cost during this year only; hence shown as new additions.

(e) Excludes Rs. 33 spent for repairing the incinerator in Horsley-konda Bungalow.

Note for Fourth Circle.—

(a) Represents cost of acquisition of land in Chittoor; improvements to existing roads in Vellore, Salem North, Salem South and cutting a trace in Salem, Central.

(b) Transfer of a road to the District Board for maintenance.

(c) Cost of establishment.

(d) Improvements to existing buildings in Vellore and cost of acquisition of land in North and South Salem divisions.

(e) Represents buildings written off in Vellore and Central Salem divisions.

(f) Due to revaluation of buildings in North Salem division.

(g) Transfer of building from the Revenue Department in Central Salem division.

(h) Represents the amount spent in improvements in Central Salem division in 1929-30 but omitted to be shown in the previous year's return.

(i) Construction of a well in Vellore division.

(j) Rates and taxes.

Note for Fifth Circle.—

(a) Due to adoption of revised figures.

(b) Represents cost of construction of an Irish bridge built by the department on the Lokanballi-Bailur road, handed back to the local fund department. Capital cost of the road (not known) is not included in the figures in column (5).

(c) Length of Ambrampalayam Sethumadai road handed back to the Local Fund department. Capital cost of this road (not known) is not included in the figures in column (5).

(d) Cost of alignment of roads proposed for construction in the future. Includes Rs. 5 spent by the Mount Stuart Commercial concern.

(e) Includes Rs. 12,479 spent by the Mount Stuart Commercial concern.

Communications and Buildings during 1931–32—*cont.*

Description of work	Name of division.	At the commencement of the year. Number.	Length.	Capital cost.	Additions and exclusions during the year. Number.	Length.	Capital cost.	At the close of the year. Number.	Length.	Capital cost.	Repairs during the year. Number.	Length.	Capital cost.
	Fifth Circle—cont.		M. F.	Rs.		M. F.	Rs.		M. F.	Rs.		M. F.	Rs.
Buildings, residential and non-residential.	Kollegal	65	..	82,602	—1	..	— 1,147	64	..	83,230	11	..	881
	Coimbatore, North.	76	..	78,164		..	(*j*) +1,777 (*f*) +1,663	77	..	82,356	57	..	1,600
	Do. South.	91	..	1,46,972	+ 1 + 1 — 6	..	+2,529 (*g*) + 626 — 2,718	86	..	(*i*) 1,64,384	43	..	+ 25 (*g*) 2,624
	Madura	111	..	1,49,920	— 5	..	(*f*) + 86 (*h*) +19,418 — 5,546	106	..	1,44,223	71	..	2,604
	Tinnevelly ..	62	..	99,460	..	..	(*h*) — 151 (*h*) + 4,488	62	..	1,03,948	49	..	2,199
	Total	405	..	5,57,118	— 10	..	+21,023	395	..	5,78,141	231	..	(*k*) 9,908 +25
Other works, such as wells, etc.	Kollegal	18	..	11,650	..	..	..	18	..	11,650	7	..	41
	Coimbatore, North.	19	..	4,420	..	..	..	19	..	4,420	5	..	33
	Do. South.	9	..	3,634	..	..	(*a*) + 40	9	..	3,674	9	..	(*l*) 50
	Madura	35	..	7,511	..	..	..	35	..	7,511	22	..	124
	Tinnevelly ..	14	..	1,770	..	..	..	14	..	1,770	3	..	21
	Total ..	95	..	28,985	..	..	+ 40	95	..	29,025	46	..	269
	Sixth Circle.												
Roads including bridle-paths and culverts.	Mangalore, North ..	36	74 6	15,449	..	..	..	36	74 6	15,449	8	48 1	535
	Do. South ..	36	107 5	28,725	+ 3	3 3	2,583	39	111 0	31,308	18	76 5	622
	Wynaad	59	218 4	82,323	..	..	(*a*) 2,187	59	218 4	84,510	53	203 0	34,791
	Nilambur	22	38 0	21,080	..	..	1,875	22	..	22,955	16	22 6	1,382
	Do.	3	..	84,235	..	0 7	+(*b*) 19,002	3	38 7	(*q*) 1,03,237	..	..	..
	The Nilgiris ..	69	113 1	37,747	+ 1	2 2	3,424	70	115 3	41,171	69	113 1	3,289
	Palghat	51	256 1	1,87,843	+ 2	(*c*) 1 4	(*d*) 162	53	257 5	1,68,005	51	246 1	3,758
	Total ..	276	808 1	4,37,402	+ 6	8 0	29,233	282	816 1	4,66,635	215	709 6	44,377

Buildings, residential and non-residential.	Mangalore, North	77	..	(i) 80,632	..	..	(e) + 11	77	..	80,643	77	..	814
	Do. South	50	..	76,771	(f)—1	..	— 918	49	..	75,853	45	..	1,071
	Wynaad	119	..	1,36,283	+2 (g)—1	..	+ 4,231 (g) — 966	120	..	1,39,548	106	..	2,524
	Nilambur	52	..	1,21,985	.. (j) — 1	..	(h) 2,043 (j) — 671	51	..	1,23,357	40	..	2,624
	The Nilgiris	96	..	1,47,047	(k) — 5	..	(k) — 419	91	..	1,46,628	54	..	2,207
	Palghat	(i) 59	..	(l) 1,43,742	+ 2	..	+ 60 (m) + 474 (n) + 9,771	61	..	1,54,047	58	..	3,743
	Do. (Chenat Nair)	10	..	30,827	..	..	...	10	..	(q) 30,827	..	..	..
	Total	463	..	7,37,287	— 4	..	+ 13,616	459	..	7,50,903	361	..	12,983
Other works, such as wells, etc.	Mangalore, North	31	..	9,689	+ 1	..	+ 278 (n) + 1,064	32	..	11,231	3	..	11
	Do. South	16	..	5,490	..	..	(n) 1,038	16	..	6,528	10	..	92
	Wynaad	22	..	8,483	+ 1	..	+ 316	23	..	8,799	17	..	211
	Nilambur	8	..	3,458	..	..	..	8	..	3,458	..	..	59
	The Nilgiris	1	..	3,919	..	..	..	1	..	3,919	1	..	100
	Palghat	11	..	4,590	+ 2	..	+ 708 (o) — 500	13	..	4,798	8	..	71
	Do. (Chenat Nair)	3	..	9,739	..	..	..	3	..	(q) 9,739	..	..	..
	Total	92	..	45,568	+ 4	..	+ 2,904	96	..	48,472	39	..	544

Note for Fifth Circle—cont.

(*f*) Cost of improvements to existing buildings.

(*g*) Excludes Rs. 195 charged to S. b. D-2—Buildings and Rs. 431 spent in 1930-31.

(*h*) Due to revaluation.

(*i*) Excludes Rs. 5,142 spent on new constructions in the Ulandi range—incomplete.

(*j*) Value of Kothanur subordinate lines completed in 1931-32 but begun in 1930-31.

(*k*) Excludes Rs. 1,389, pay of bungalow watchers.

(*l*) Excludes Rs. 302 spent by the Mount Stuart commercial concern on repairs, Rs. 527 on Telephone Lineman's pay and Rs. 842 being charges on account of interest and depreciation.

Note for Sixth Circle—

(*a*) Expenditure on construction of a bridge on Begur-Chambal road.

(*b*) Expenditure incurred by Forest Engineer on roads and bridges in Nilambur division; under construction by the Forest Engineer.

(*c*) Excludes 10 miles of extraction roads and bridle-paths taken into account in the last year's return.

(*d*) Excludes a sum of Rs. 2,286 (representing value of the roads transferred from the Forest Engineering division) taken into account in the last year's return.

(*e*) Expenditure on District Forest Officer's quarters.

(*f*) Adhur Range office building transferred to the Revenue Department.

(*g*) Combined Forester's quarters at Boothakkal, dismantled.

(*h*) Represents expenditure on new works amounting to Rs. 1,938; and Rs. 81 being value of timber used for Forester's quarter's at Beypore.

(*i*) Correct figure adopted.

(*j*) Serambi at Edacode dismantled.

(*k*) Written off.

(*l*) Correct figure adopted after excluding the cost of the Forest Engineering division buildings originally included in 1930-31 as the adjustment of the cost was made in 1931-32.

(*m*) Represents cost of improvements to existing buildings inclusive of land acquisition charges for Melathur depot site amounting to Rs. 380.

(*n*) Cost of Engineering division buildings transferred to the division adjusted in 1931-32.

(*o*) Cost of installation of a windmill in the District Forest Officer's quarters at Kadri hill.

(*q*) Belong to the commercial concern.

Communications and Buildings during 1931-32—*cont.*

Description of work.	Name of division.	At the commencement of the year.			Additions and exclusions during the year.			At the close of the year.			Repairs during the year.		
		Number.	Length.	Capital cost.	Number.	Length.	Capital cost.	Number.	Length.	Capital cost.	Number.	Length.	Capital cost.
				Rs.			Rs.			Rs.			Rs.
Roads including bridle-paths and culverts.	Parlakimedi Maliahs.						Nil.						
Buildings, residential and non-residential.		39	..	5,454	..	..	..	39	..	5,454	30	..	270
Other works such as wells.		2	..	559	..	..	..	2	..	559	..	..	..
Grand Total, Presidency.	Roads including bridle-paths and culverts.	995	3,971	17,21,759	30	40	1,47,682	1,025	4,014	18,69,441	463	2,075	1,14,719
	Buildings, residential and non-residential.	2,081	..	26,14,346	32	..	43,806	2,047	..	26,57,970	1,222	..	58,888
	Other works.	579	..	1,66,692	26	..	9,465	605	..	1,76,157	153	..	1,809

ANNUAL FORM No. 30.

Forest Department, Madras Presidency.

Return of Breaches of Forests Rules during 1931-32.

Annual Form No. 30.

Forest Department, Madras.

Return of Breaches of Forest Rules during 1931-32.

District.		Cases pending from 1930-31.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
First Circle.															
Reserves.															
Ganjam	A	9	1	123	4	1	129	138	49	225	76	200	125	425	13
	B	24	2	393	54	8	457	481	354	1,185	65	212	419	1,397	62
	C	..	59	41	..	..	100	..	..	..	..	..	..	..	..
	Total	33	62	557	58	9	686	619	403	1,410	141	412	544	1,822	75
Vizagapatam	A	10	..	94	3	2	99	109	30	85	75	178	105	263	4
	B	61	1	131	13	3	148	209	158	490	6	26	164	516	45
	C	..	..	2	..	..	2	..	..	..	..	..	..	..	..
	Total	71	1	227	16	5	249	318	188	575	81	204	269	779	49
Upper Godavari	A	3	..	4	..	..	4	7	6	8	..	..	6	8	1
	B	1	1	86	23	3	113	114	79	197	1	1	80	198	34
	C	..	38	4	3	1	46	..	..	..	..	..	..	..	..
	Total	4	39	94	26	4	163	121	85	205	1	1	86	206	35
Lower Godavari	A	53	..	60	16	3	79	132	119	275	1	1	120	276	12
	B	69	..	307	71	4	382	451	279	392	29	35	308	427	143
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	122	..	367	87	7	461	583	398	667	30	36	428	703	155

Guntur ..	A ..	326	..	294	129	10	433	759	222	551	362	1,035	584	1,586	175
	B ..	62	..	304	155	10	469	531	402	899	2	7	404	906	127
	C ..	..	..	10	..	1	11	..	..	..	..	..	..	..	..
	Total ..	388	..	608	284	21	913	1,290	624	1,450	364	1,042	988	2,492	302
Nellore ..	A ..	37	..	142	72	1	215	252	40	120	191	393	231	513	21
	B ..	4	..	120	69	3	192	196	144	295	13	81	157	376	39
	C ..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
	Total ..	41	..	263	141	4	408	448	184	415	204	474	388	889	60
Total, First Circle by Forest Officers.	A ..	438	1	717	224	17	959	1,397	466	1,264	705	1,807	1,171	3,071	226
	B ..	221	4	1,341	385	31	1,761	1,982	1,416	3,458	116	362	1,532	3,820	450
	C ..	..	97	58	3	2	160	..	..	..	..	..	..	..	..
	Total ..	659	102	2,116	612	50	2,880	3,379	1,882	4,722	821	2,169	2,703	6,891	676

Unreserves.

Ganjam ..	A ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	B ..	3	..	19	..	..	19	22	22	31	..	..	22	31	..
	C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ..	3	..	19	..	..	19	22	22	31	..	..	22	31	..
Vizagapatam.	A ..	..	..	21	1	1	23	23	10	10	12	12	22	22	1
	B ..	10	..	169	20	60	249	259	242	781	9	27	251	808	8
	C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ..	10	..	190	21	61	272	282	252	791	21	39	273	830	9
Upper Godavari.	A ..	10	..	1	..	..	1	11	10	24	..	..	10	24	1
	B ..	2	..	83	..	2	85	87	47	72	..	..	47	72	40
	C ..	..	..	7	..	..	7	..	..	..	..	..	..	..	..
	Total ..	12	..	91	..	2	93	98	57	96	..	..	57	96	41
Lower Godavari	A ..	2	2	101	4	1	108	110	61	162	44	207	105	369	5
	B ..	16	..	250	5	3	258	274	215	374	17	39	232	413	42
	C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ..	18	2	351	9	4	366	384	276	536	61	246	337	782	47

A = Cases taken to Court. B = Cases compounded. C = Cases undetected.

Return of Breaches of Forest Rules during 1931-32—*cont.*

District.		Cases pending from 1930-31.	New cases of the year. Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.	Disposed of during the year. Convictions. Cases.	Convictions. Persons.	Acquittals. Cases.	Acquittals. Persons.	Total. Cases.	Total. Persons.	Cases pending at close of year.
FIRST CIRCLE—*cont.*															
***Unreserves*—cont.**															
Guntur ..	A ..	62	..	30	2	3	35	97	11	16	47	90	58	106	39
	B ..	122	..	250	10	38	298	420	309	661	9	11	318	672	102
	C ..	..	..	35	..	8	43	..	..	..	..	..	..	..	..
	Total ..	184	..	315	12	49	376	517	320	677	56	101	376	778	141
Nellore ..	A ..	2	..	44	..	1	45	47	19	32	5	8	24	40	23
	B ..	67	..	239	..	..	239	306	183	317	52	77	235	394	71
	C ..	..	..	15	..	..	15	..	..	..	..	..	..	..	..
	Total ..	69	..	298	..	1	299	353	202	349	57	85	259	434	94
Total ..	A ..	76	2	197	7	6	212	288	111	244	108	317	219	561	69
	B ..	220	..	1,010	35	103	1,148	1,368	1,018	2,236	87	154	1,105	2,390	263
	C ..	..	..	57	..	8	65	..	..	..	..	..	..	..	..
	Total ..	296	2	1,264	42	117	1,425	1,656	1,129	2,480	195	471	1,324	2,951	332
Circle total.	A ..	514	3	914	231	23	1,171	1,685	577	1,508	813	2,124	1,390	3,632	295
	B ..	441	4	2,351	420	134	2,909	3,350	2,434	5,694	203	516	2,637	6,210	713
	C ..	..	97	115	3	10	225	..	..	..	..	..	..	..	..
Grand Total ..		955	104	3,380	654	167	4,305	5,035	3,011	7,202	1,016	2,640	4,027	9,842	1,008

Second Circle.

Reserves under the control of the Forest Department.

Anantapur.	A	..	73	..	128	89	13	230	303	119	374	154	444	273	818	30
	B	..	66	..	191	144	32	367	433	344	764	31	59	375	823	58
	C	..	..	111	23	..	..	134	..	..	..	..	..	..	..	..
	Total	..	139	111	342	233	45	731	736	463	1,138	185	503	648	1,641	88
Kurnool, East.	A	..	11	..	45	43	3	91	102	19	40	72	204	91	244	11
	B	..	31	..	89	109	4	202	233	186	405	25	121	211	526	22
	C	..	..	21	12	1	..	34	..	..	..	..	..	..	..	..
	Total	..	42	21	146	153	7	327	335	205	445	97	325	302	770	33
Kurnool, South.	A	..	36	..	105	27	21	153	189	114	227	70	229	184	456	5
	B	..	35	1	154	67	33	255	290	229	573	..	..	229	573	61
	C	..	..	24	33	7	1	65	..	..	..	..	..	..	..	..
	Total	..	71	25	292	101	55	473	479	343	800	70	229	413	1,029	66
Kurnool, West.	A	..	77	..	114	52	5	171	248	69	179	175	541	244	720	4
	B	..	35	..	225	124	10	359	394	309	903	25	82	334	985	60
	C	..	..	60	40	..	..	100	..	..	..	..	..	..	..	..
	Total	..	112	60	379	176	15	630	642	378	1,082	200	623	578	1,705	64
Cuddapah, North.	A	..	66	..	221	111	6	338	404	184	502	182	499	366	1,001	38
	B	..	10	..	222	62	5	289	299	183	392	29	88	212	480	87
	C	..	..	..	32	..	..	32	..	..	..	..	..	..	..	..
	Total	..	76	..	475	173	11	659	703	367	894	211	587	578	1,481	125
Cuddapah, South.	A	..	24	..	119	63	14	196	220	59	234	136	341	195	575	25
	B	..	27	..	202	100	28	330	357	258	541	32	81	290	622	67
	C	..	..	..	16	..	..	16	..	..	..	..	..	..	..	..
	Total	..	51	..	337	163	42	542	577	317	775	168	422	485	1,197	92
Total, Reserves.	A	..	287	..	732	385	62	1,179	1,466	564	1,556	789	2,258	1,353	3,814	113
	B	..	204	1	1,083	606	112	1,802	2,006	1,509	3,578	142	431	1,651	4,009	355
	C	..	..	216	156	6	1	381	..	..	..	..	..	..	..	..
Grand Total A, B and C Reserves.			491	217	1,971	999	175	3,362	3,472	2,073	5,134	931	2,689	3,004	7,823	468

A — Cases taken to Court. B — Cases compounded. C — Cases undetected.

Return of Breaches of Forest Rules during 1931-32—*cont.*

District.		Cases pending from 1930-31.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons	Cases.	Persons.	Cases.	Persons	
SECOND CIRCLE—*cont.*															
Unreserves.															
Anantapur.	A ..	10	1	149	..	5	155	165	53	86	102	131	155	217	10
	B ..	90	5	309	..	26	340	430	345	565	11	11	356	576	74
	C ..	..	..	19	..	..	19	..	..	..	..	..	..	..	..
	Total ..	100	6	477	..	31	514	595	398	651	113	142	511	793	84
Kurnool, East.	A ..	..	..	10	..	..	10	10	5	23	4	6	9	29	1
	B ..	12	..	66	..	..	66	78	35	44	43	61	78	105	..
	C ..	..	..	3	..	..	3	..	..	..	..	..	..	..	..
	Total ..	12	..	79	..	..	79	88	40	67	47	67	87	134	1
Kurnool, South.	A ..	1	..	19	..	..	19	20	6	8	12	20	18	28	2
	B ..	8	..	34	..	2	36	44	37	61	..	..	37	61	7
	C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ..	9	..	53	..	2	55	64	43	69	12	20	55	89	9
Kurnool, West.	A ..	..	..	30	8	10	48	48	23	56	21	23	44	79	4
	B ..	9		75	6	1	82	91	48	83	43	50	91	133	..
	C ..	..	..	4	..	..	4	..	..	..	..	..	..	..	..
	Total ..	9	..	109	14	11	134	139	71	139	64	73	135	212	4

Cuddapah, North.	A	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	39	..	..	39	39	39	48	..	..	39	48	..
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total		..	..	..	39	..	..	39	39	39	48	..	..	39	48	..
Cuddapah, South.	A	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	64	..	..	64	64	62	66	..	..	62	66	2
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total		..	..	..	64	..	..	64	64	62	66	..	..	62	66	2
Total, Unreserves.	A	..	11	1	208	8	15	232	243	87	173	139	180	226	353	17
	B	..	119	5	587	6	29	627	746	566	867	97	122	663	989	83
	C	..	..	..	26	..	..	26	..	..	..	..	..	..	..	..
Grand Total, Unreserves A, B & C.			130	6	821	14	44	885	989	653	1,040	236	302	889	1,342	100
Grand Total, Reserves and Unreserves.	A	..	298	1	940	393	77	1,411	1,709	651	1,729	928	2,438	1,579	4,167	130
	B	..	323	6	1,670	612	141	2,429	2,752	2,075	4,445	239	553	2,314	4,998	438
	C	..	..	216	182	8	1	407	..	..	..	..	..	..	..	..
Grand Total of Reserves and Unreserves A, B & C.			621	223	2,792	1,013	219	4,247	4,461	2,726	6,174	1,167	2,991	3,893	9,165	568

Fourth Circle.

Reserves.

Chittoor ..	A	..	65	..	149	120	15	284	349	106	271	* 184	406	290	677	59
	B	..	27	..	152	130	17	299	326	241	464	25	112	266	576	60
	C	..	..	58	4	..	..	62	..	..	..	..	..	..	..	..
Total		..	92	58	305	250	32	645	675	347	735	209	518	556	1,253	119
Vellore ..	A	..	105	..	552	227	12	791	896	253	587	457	1,030	710	1,617	186
	B	..	241	..	497	171	8	676	917	745	1,404	17	30	762	1,434	155
	C	..	..	..	29	..	..	29	..	..	..	..	..	..	..	..
Total		..	346	..	1,078	398	20	1,496	1,813	998	1,991	474	1,060	1,472	3,051	341

A = Cases taken to Court. B = Cases compounded. C = Cases undetected.

Note.—The difference between the II Circle closing balance of 1930-31 and the opening balance of 1931-32 are due to the transfer of cases from one head to another.

* This includes 179 cases in which compounding fees were collected by Magistrates and acquitted.

Return of Breaches of Forest Rules during 1931-32—*cont.*

District.	Cases pending from 1930-31.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
FOURTH CIRCLE—*cont.*														
***Reserves*—cont.**														
Salem, North. A	18	1	89	51	12	153	171	45	97	117	217	162	314	9
Salem, North. B (a)	23	..	248	134	6	388	411	348	572	35	97	383	669	28
Salem, North. C	..	73	..	..	..	73	..	..	..	..	..	..	..	..
Salem, North. Total	41	74	337	185	18	614	582	393	669	152	314	545	983	37
Salem, Central. A	513	..	906	94	11	1,011	1,524	254	516	1,027	1,694	1,281	2,210	243
Salem, Central. B (a)	59	..	390	123	13	526	585	427	747	19	40	446	787	139
Salem, Central. C	..	43	19	..	..	62	..	..	..	..	..	..	..	..
Salem, Central. Total	572	43	1,315	217	24	1,599	2,109	681	1,263	1,046	1,734	1,727	2,997	382
Salem, South. A	66	1	246	32	10	289	355	51	167	254	527	305	694	50
Salem, South. B (a)	38	1	259	57	33	350	388	266	540	31	113	297	653	91
Salem, South. C	..	76	12	..	..	88	..	..	..	..	..	..	..	..
Salem, South. Total	104	78	517	89	43	727	743	317	707	285	640	602	1,347	141
Total A	767	2	1,942	524	60	2,528	3,295	709	1,638	2,039	3,874	2,748	5,512	547
Total B	388	1	1,546	615	77	2,239	2,627	2,027	3,727	127	392	2,154	4,119	473
Total C	..	250	64	...	..	314	..	..	..	..	..	..	..	..
Grand Total	1,155	253	3,552	1,139	137	5,081	5,922	2,736	5,365	2,166	4,266	4,902	9,631	1,020

Unreserves.

Chittoor ..	A	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	2	129	3	1	135	135	135	138	..	..	135	138	..
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total		..	..	2	129	3	1	135	135	135	138	..	..	135	138	..
Vellore ..	A	..	8	1	317	12	4	334	342	67	116	275	511	342	627	..
	B	..	763	1	657	29	25	712	1,475	1,215	2,057	..	..	1,215	7,057	260
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total		..	771	2	974	41	29	1,046	1,817	1,282	2,173	275	511	1,557	2,684	260
Salem, North.	A	..	1	..	21	..	..	21	22	2	4	† 20	29	22	33	..
	B	..	15	..	205	..	20	225	240	219	351	1	1	220	352	20
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total		..	16	..	226	..	20	246	262	221	355	21	30	242	385	20
Salem, Central.	A (a)		19	..	95	..	..	95	105	35	39	49	55	84	94	21
	B		317	..	560	..	53	613	930	530	790	81	101	611	891	319
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total		..	327	..	655	..	53	708	1,035	565	829	130	156	695	985	340
Salem, South.	A (b)		9	..	71	..	..	71	80	8	15	67	89	75	104	5
	B		124	..	482	..	8	490	614	454	566	..	..	454	566	160
	C	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
Total		..	133	..	554	..	8	562	694	462	581	67	89	529	670	165
Total ..	A	..	28	1	504	12	4	521	549	112	174	411	684	523	858	26
	B	..	1,219	3	2,033	32	107	2,175	3,394	2,553	3,902	82	102	2,635	4,004	759
	C	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
Grand Total		..	1,247	4	2,538	44	111	2,697	3,943	2,665	4,076	493	786	3,158	4,862	785

A = Cases taken to Court. B = Cases compounded. C = Cases undetected.

Note for Fourth Circle—

(a) The difference in the opening balance under (A and B) is due to actuals as furnished in Taluk returns.

(b) The difference in the opening balance under (A and B) is due to transfer of cases from B to A.

* Compounding fees were collected in Court in 115 cases and 2 cases were acquitted for want of evidence.

† Represents 18 cases where compounding fees were paid in Court and 2 cases acquitted for want of evidence.

Return of Breaches of Forest Rules during 1931-32—*cont.*

District.		Cases pending from 1930-31.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
FIFTH CIRCLE.															
Reserves.															
Kollegal.	A ..	32	2	91	51	13	157	189	62	192	120	364	182	556	7
	B ..	10	..	168	98	16	282	292	206	465	69	220	275	685	17
	C ..	..	155	14	..	..	169	..	..	..	..	..	..	..	..
	Total ..	42	157	273	149	29	608	481	268	657	189	584	457	1,241	24
Coimbatore, North.	A ..	60	1	218	58	11	288	348	51	117	179	378	230	495	118
	B ..	36	..	236	93	17	346	382	276	629	26	56	302	685	80
	C ..	..	..	7	..	4	11	..	..	..	..	..	..	..	..
	Total ..	96	1	461	151	32	645	730	327	746	205	434	532	1,180	198
Coimbatore, South.	A ..	23	..	78	17	32	127	150	23	91	70	181	93	272	57
	B ..	16	..	47	33	28	108	124	116	237	8	29	124	266	..
	C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ..	39	..	125	50	60	235	274	139	328	78	210	217	538	57
Madura ..	A ..	427	1	844	84	8	937	1,364	457	1,316	602	1,494	1,059	2,810	305
	B ..	14	5	461	91	15	572	586	374	780	29	98	403	878	183
	C ..	..	91	..	..	..	91	..	..	..	..	..	..	..	..
	Total ..	441	97	1,305	175	23	1,600	1,950	831	2,096	631	1,592	1,462	3,688	488

Tinnevelly	A	..	39	..	250	72	5	327	366	151	371	163	318	314	689	52
	B	..	64	..	245	105	7	357	421	..	..	365	682	365	682	56
	C	..	..	..	1	1	..	2	..	..	..	..	..	..	..	..
	Total	..	103	..	496	178	12	686	787	151	371	528	1,000	679	1,371	108
Circle Total.	A	..	581	4	1,481	282	69	1,836	2,417	744	2,087	1,134	2,735	1,878	4,822	539
	B	..	140	5	1,157	420	83	1,665	1,805	972	2,111	497	1,085	1,469	3,196	336
	C	..	..	246	22	1	4	273	..	..	..	..	..	..	..	..
Total, Reserves		..	721	255	2,660	703	156	3,774	4,222	1,716	4,198	1,631	3,820	3,347	8,018	875

Unreserves.

Kollegal..	A	..	8	..	12	..	1	13	21	3	3	18	18	21	21	..
	B	..	5	2	44	..	2	48	53	46	70	1	2	47	72	
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	13	2	56	..	3	61	74	49	73	19	20	68	93	6
Coimbatore, North.	A	..	..	..	33	..	10	43	43	24	32	19	28	43	60	..
	B	..	15	1	66	..	13	80	95	83	145	..	..	83	145	12
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	15	1	99	..	23	123	138	107	177	19	28	126	205	12
Coimbatore, South.	A	..	3	..	1	..	..	1	4	4	7	..	..	4	7	..
	B	..	8	..	20	..	5	25	33	33	*	..	..	33	*	*
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	11	..	21	..	5	26	37	37	7	..	..	37	7	..
Madura ..	A	..	90	..	192	6	29	227	317	67	120	228	350	295	470	22
	B	..	152	..	351	8	16	375	527	328	448	14	15	342	463	185
	C	..	..	1	34	..	4	39	..	..	..	..	..	..	..	..
	Total	..	242	1	577	14	49	641	844	395	568	242	365	637	933	207

A = Cases taken to Court. B = Cases compounded and withdrawn. C = Cases undetected.

* Number of persons not furnished by the Revenue Divisional Officers.

NOTE.—The difference between the closing balance of 1930-31 and the opening balance of 1931-32 is due to transfer of cases from one head to another.

Return of Breaches of Forest Rules during 1931-32—*cont.*

District.		Cases pending from 1930-31.	New cases of the year. Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.	Disposed of during the year. Convictions. Cases.	Convictions. Persons.	Acquittals. Cases.	Acquittals. Persons.	Total. Cases.	Total. Persons.	Cases pending at close of year.
FIFTH CIRCLE—*cont.*															
***Unreserves*—cont.**															
T innevelly	A	5	..	77	1	9	87	92	16	28	70	86	86	114	6
	B	53	1	289	9	44	343	396	..	..	350	461	350	461	46
	C	..	..	4	..	..	4	..	..	..	..	..	..	..	..
Total		58	1	370	10	53	434	488	16	28	420	547	436	575	52
Circle total.	A	106	..	315	7	49	371	477	114	190	335	482	449	672	28
	B	233	4	770	17	80	871	1,104	490	663	365	478	855	1,141	249
	C	..	1	38	..	4	43	..	..	..	..	..	..	..	..
Total, Unreserves		339	5	1,123	24	133	1,285	1,581	604	853	700	960	1,304	1,813	277
,, Reserves		721	255	2,660	703	156	3,774	4,222	1,716	4,198	1,631	3,820	3,347	8,018	875
Grand Total		1,060	260	3,783	727	289	5,059	5,803	2,320	5,051	2,331	4,780	4,651	9,831	1,152

A = Cases taken to Court. B = Cases compounded and withdrawn. C = Cases undetected.

NOTE.—The difference between the closing balance of 1930-31 and the opening balance of 1931-32 is due to transfer of cases from one head to another.

SIXTH CIRCLE.

Reserved Forest.

Mangalore, North.	A	(e) 16	1	12	2	1	16	32	21	35	(g) 2	9	24	47	8
											(f) 1	3			
	B	(e) 55	..	185	26	12	223	278	211	408	(d) 12	39	223	447	55
	C	..	71	..	..	..	71	71	..	..	..	..	..	..	..
Total		71	72	197	28	13	310	381	232	443	15	51	247	494	63

Mangalore, South.	A	..	(e) 16	3	30	10	13	56	72	29	67	3	27	32	94	40
	B	..	(e) 50	6	151	46	26	229	279	177	343	(d) 53	110	230	453	49
	C	..	..	130	..	..	..	130	130	..	..	..	..	..	..	..
	Total	..	66	139	181	56	39	415	481	206	410	56	137	262	547	89
Wynaad.	A	..	2	..	1	1	2	4	6	3	4	..	..	3	4	3
	B	..	9	1	5	10	2	18	27	18	25	..	..	18	25	9
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	11	1	6	11	4	22	33	21	29	..	..	21	29	12
Nilambur.	A	..	..	..	1	11	..	12	12	9	12	(f) 1	6	11	19	1
												1	1			
	B	..	..	1	3	34	7	45	45	28	93	3	17	31	110	14
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	..	1	4	45	7	57	57	37	105	5	24	42	129	15
The Nilgiris.	A	..	8	1	3	8	3	15	23	15	40	4	9	19	49	4
	B	..	144	5	150	178	321	654	798	537	1,462	20	67	557	1,529	241
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	152	6	153	186	324	669	821	552	1,502	24	76	576	1,578	245
Palghat.	A	..	9	1	14	2	1	18	27	21	74	(g) 1	8	22	82	5
	B	..	29	1	168	41	11	221	250	217	394	(d) 5	6	222	400	28
	C	..	..	13	..	..	..	13	13	..	..	..	..	..	..	..
	Total	..	38	15	182	43	12	252	290	238	468	6	14	244	482	33
Total, Sixth Circle.	A	..	51	6	61	34	20	121	172	98	232	13	63	111	295	61
	B	..	287	14	662	335	379	1,390	1,677	1,188	2,725	93	239	1,281	2,964	396
	C	..	..	214	..	..	..	214	214	..	..	..	..	..	..	..
	Total	..	338	234	723	369	399	1,725	2,063	1,286	2,957	106	302	1,392	3,259	457

A = Cases taken to Court. B = Cases compounded. C = Cases undetected.

(d) Cases withdrawn.
(e) Differences between the closing balance of 1930-31 and the opening balance of 1931-32 are due to the transfer of cases from one head to another.
(f) Acquitted by Magistrate after payment of compounding fees in Court.
(g) Acquitted by Magistrate for want of evidence.

Return of Breaches of Forest Rules during 1931-32—*cont.*

District.	Cases pending from 1930-31.	New cases of the year.						Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.	Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
SIXTH CIRCLE—*cont.*														
Unreserves.														
Mangalore, North. A	(e) 15	..	68	..	9	77	92	25	30	(g) 6	9	75	92	17
B	(e) 52	..	131	..	23	154	206	152	201	(f) 44	53			
C	..	..	..	..	..	..	..	..	..	(d) 6	6	158	207	48
Total	67	..	199	..	32	231	298	177	231	56	68	233	299	65
Mangalore, South. A	(e) 23	2	8	..	2	12	35	19	22	10	16	29	38	6
B	(e) 29	173	75	..	2	250	279	106	120	..	..	106	120	173
C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	52	175	83	..	4	262	314	125	142	10	16	135	158	179
Wynaad. A	..	..	1	..	..	1	1	..	..	1	1	1	1	..
B	..	..	8	..	..	8	8	8	8	..	..	8	8	..
C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	9	..	..	9	9	8	8	1	1	9	9	..
Palghat. A	..	..	1	..	..	1	1	1	1	..	..	1	1	..
B	26	..	43	..	..	43	69	62	62	..	..	62	62	7
C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	26	..	44	..	..	44	70	63	63	..	..	63	63	7

Total, Unreserves, Sixth circle.	A	38	2	78	..	11	91	129	45	53	61	79	106	132	23
	B	107	173	257	..	25	455	562	328	391	6	6	334	397	228
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	145	175	335	..	36	546	691	373	444	67	85	440	529	251
Total, Reserves and Unreserves.	A	89	8	139	34	31	212	301	143	285	74	142	217	427	84
	B	394	187	919	335	404	1,845	2,239	1,516	3,116	99	245	1,615	3,361	624
	C	..	214	..	..	..	214	214	..	..	..	..	..	..	..
Total	..	483	409	1,058	369	435	2,271	2,754	1,659	3,401	173	387	1,832	3,788	708

A = Cases taken to Court. B = Cases compounded. C = Cases undetected.

(*d*) Cases withdrawn.
(*e*) Differences between the closing balance of 1930-31 and the opening balance of 1931-32 are due to the transfer of cases from one head to another.
(*f*) Acquitted by Magistrate after payment of compounding fees in Court.
(*g*) Acquitted by Magistrate for want of evidence.

Parlakimedi Maliahs.

Notified blocks under section 26 of the Act.

Cases taken to Court.	A	18	..	12	..	..	12	30	18	34	(*b*) 16	35	34	69	2
Cases compounded.	B	11	..	86	5	..	91	102	66	134	(*a*) 9	20	75	154	11
Undetected	..	..	23	..	..	..	53	..	..	..	..	..	..	..	..
Total	..	29	23	98	5	..	126	132	84	168	25	55	109	223	34

Unreserves.

Cases taken to Court.	A	13	..	9	..	..	9	22	12	28	(*b*) 10	23	22	51	13
Cases compounded.	B	8	..	77	4	..	81	89	51	73	(*a*) 8	27	59	100	6
Undetected	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	21	..	86	4	..	90	111	63	101	18	50	81	151	19
Grand Total	..	50	23	184	9	..	216	243	147	269	43	105	190	374	53

(*a*) These cases were withdrawn by the Special Forest Officer.
(*b*) Of these, 24 cases were acquitted on payment of compounding fees in Court and 2 on merits.

Return of Breaches of Forest Rules during 1931-32—*cont.*

District.	Cases pending from 1931-32.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling of appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Conviction.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
PARLAKIMEDI MALIAHS—*cont.*														
Total, Reserves. A	2,124	13	4,933	1,449	228	6,623	8,747	2,581	6,777	4,680	10,737	7,261	77,514	1,486
B	1,240	25	5,789	2,361	682	8,857	10,087	7,112	15,599	975	2,509	8,087	18,108	2,010
C	..	1,023	300	12	7	1,342	214	..	..	..	..	..	..	..
Total ..	3,364	1,061	11,022	3,822	917	16,822	19,058	9,693	22,376	5,655	13,246	15,348	35,622	3,496
Total, Unreserves. A	290	6	1,323	34	85	1,448	1,738	499	896	1,080	1,800	1,579	2,696	199
B	1,917	185	4,820	99	344	5,448	7,365	5,072	8,266	654	909	5,726	9,175	1,599
C	..	24	122	..	12	158	..	..	..	..	..	..	..	..
Total ..	2,207	215	6,265	133	441	7,054	9,103	5,571	9,162	1,734	2,709	7,305	11,871	1,798
Total, Presidency. A	2,414	19	6,256	1,483	313	8,071	10,485	3,080	7,673	5,760	12,537	8,840	20,210	1,685
B	3,157	210	10,609	2,460	1,026	14,305	17,462	12,184	23,865	1,629	3,418	13,813	27,283	3,609
C	..	1,047	422	12	19	1,500	214	..	..	..	..	..	..	..
Grand Total, Presidency.	5,571	1,276	17,287	3,955	1,358	23,876	28,161	15,264	31,538	7,389	15,955	22,653	47,493	5,294

Annual Form No. 31.

Forest Department, Madras Presidency.

Area of Forest Tracts protected from fire during the calendar year 1931.

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.
			Area attempted to be protected.	Fires.	Actually protected.	
	First Circle.	ACS.	ACS.	ACS.	ACS.	RS.
Ganjam ..	Special protection ..	51,530	56,335	293	56,042	2,915
	General do. ..	172,819	214,941	3,060	211,881	2,837
	Total ..	224,349	271,276	3,353	267,923	5,752
Vizagapatam.	Special protection ..	72,770	78,921	83	78,838	161
	General do. ..	16,478	17,738	25	17,713	65
	Total ..	89,248	96,659	108	96,551	226
Godavari, Upper.	Special protection ..	367,174	530,076	136,525	393,551	4,746
	General do. ..	1,140	1,140	4	1,136	..
	Total ..	368,314	531,216	136,529	394,687	4,746
Godavari, Lower.	Special protection ..	110,825	116,854	14,400	102,454	1,132
	General do. ..	108,248	109,564	1,073	108,491	372
	Total ..	219,073	226,418	15,473	210,945	1,504
Guntur ..	Special protection ..	..	..	..	..	..
	General do. ..	329,847	332,736	1,818	330,918	..
	Total ..	329,847	332,736	1,818	330,918	..
Nellore ..	Special protection ..	110,788	115,029	5,387	109,642	242
	General do. ..	122,899	123,129	157	122,972	..
	Total ..	233,687	238,158	5,544	232,614	242
Total, First Circle.	Special protection ..	713,087	897,215	156,688	740,527	9,196
	General do. ..	751,431	799,248	6,137	793,111	3,274
	Grand Total ..	1,464,518	1,696,463	162,825	1,533,638	12,470
	Second Circle.					
Anantapur.	Special protection ..	15,936	46,572	11,817	34,755	42
	Early burning ..	23,392	25,410	6,848	18,562	157
	General protection ..	324,215	297,158	34,973	262,185	..
	Total ..	363,543	369,140	53,638	315,502	199
Kurnool, East.	Early burning ..	87,088	87,320	5,994	81,326	534
	General protection ..	517,254	517,254	6,711	510,543	250
	Total ..	604,342	604,574	12,705	591,869	784

Area of Forest Tracts protected from fire during the calendar year 1931—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report. Area attempted to be protected.	Fires.	Actually protected.	Cost during the year under report.
	Second Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS. A.
Kurnool, South.	Special protection ..	..	16	16	..	..
	Early burning ..	171,063	166,265	283	165,982	468 0
	General protection ..	257,559	259,262	780	258,482	..
	Total ..	428,622	425,543	1,079	424,464	468 0
Karnool, West.	Special protection ..	3,388	3,888	..	3,888	36 0
	Early burning.. ..	7,180	4,532	135	4,397	1,202 0
	General protection ..	536,428	538,366	23,734	514,632	255 0
	Total ..	546,996	546,786	23,869	522,917	1,493 0
Cuddapah, North.	Early burning.. ..	27,623	34,363	798	33,565	203 0
	General protection ..	391,044	450,868	171,248	279,620	27 0
	Total ..	418,667	485,231	172,046	313,185	230 0
Cuddapah, South.	Special protection ..	34,591	..	..	..	..
	Early burning ..	66,994	77,734	2,822	74,912	341 0
	General protection ..	309,721	351,447	32,234	319,213	416 0
	Total ..	405,306	429,181	35,056	394,125	757 0
Total, Second Circle.	Special protection ..	53,915	50,476	11,833	38,643	78 0
	Early burning ..	377,340	395,624	16,880	378,744	2,905 0
	General protection ..	2,336,221	2,414,355	269,680	2,144,675	948 0
	Grand Total ..	2,767,476	2,860,455	298,393	2,562,062	3,931 0
	Fourth Circle.					
Chittoor ..	Special protection * ..	35,933	38,423	918	37,505	511 6
	General do. ..	328,987	331,277	6,692	324,585	..
	Total ..	364,920	369,700	7,610	362,090	511 6
Vellore ..	Special protection ..	190,348	192,605	14,991	177,614	2,408 4
	General do. ..	250,815	253,645	4,417	249,228	..
	Total ..	441,163	446,250	19,408	426,842	2,408 4
Salem, North.	Special protection ..	62,795	66,448	3,426	63,022	688 0
	General do. ..	272,335	296,633	23,746	272,887	..
	Total ..	335,130	363,081	27,172	335,909	688 0
Salem, Central.	Special protection ..	246,979	249,159	5,101	244,058	1,381 0
	General do. ..	206,501	206,432	1,853	204,579	..
	Total ..	453,480	455,591	6,954	448,637	1,381 0

NOTE.—In this circle there is no early burning except in Chittoor where *fire protection consists of early burning in a modified form.

Area of Forest Tracts protected from fire during the calendar year 1931—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.
			Area attempted to be protected.	Fires.	Actually protected.	
	Fourth Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS. A.
Salem, South.	Special protection ..	123,643	124,355	1,889	122,466	447 10
	General do. ..	39,087	39,752	1,684	38,068	..
	Total ..	162,730	164,107	3,573	160,534	447 10
Total, Fourth Circle.	Special protection ..	659,698	670,990	26,325	644,665	5,436 4
	General do. ..	1,097,725	1,127,739	38,392	1,089,347	..
	Grand Total ..	1,757,423	1,798,729	64,717	1,734,012	5,436 4
	Fifth Circle.					
Kollegal ..	Special protection ..	17,984	2,630	..	2,630	107 0
	Early burning ..	..	..	..	..	..
	General protection ..	543,744	600,459	54,171	546,288	605 0
	Total ..	561,728	603,089	54,171	548,918	712 0
North Coimbatore.	Special protection ..	863	1,088	148	940	173 0
	Early burning ..	25,640	22,720	..	22,720	315 0
	General protection ..	486,252	508,590	17,947	490,643	1,370 0
	Total ..	512,755	532,398	18,095	514,303	1,858 0
South Coimbatore.	Special protection ..	4,672	5,006	74	4,932	1,388 0
	Early burning ..	90	90	..	90	..
	General protection ..	240,731	241,689	4,968	236,721	..
	Total ..	245,493	246,785	5,042	241,743	1,388 0
Madura ..	Special protection ..	84,805	89,495	4,121	85,374	2,454 0
	Early burning ..	128,402	129,222	1,122	128,100	813 0
	General protection ..	192,370	194,787	1,303	193,484	..
	Total ..	405,577	413,504	6,546	406,958	3,267 0
Tinnevelly.	Special protection ..	130,070	135,537	9,362	126,175	471 0
	Early burning ..	..	..	..	..	..
	General protection ..	106,091	107,400	2,734	104,666	..
	Total ..	236,161	242,937	12,096	230,841	471 0
Circle, Total.	Special protection ..	238,394	233,756	13,705	220,051	4,593 0
	Early burning ..	154,132	152,032	1,122	150,910	1,128 0
	General protection ..	1,569,188	1,652,975	81,123	1,571,802	1,975 0
	Grand Total ..	1,961,714	2,038,713	95,950	1,942,763	7,696 0
	Sixth Circle.					
Mangalore, North.	Early burning ..	3,455	2,823	..	2,823	44 0
	Special protection ..	66,625	68,765	1,705	67,060	1,589 0
	General do. ..	156,764	158,308	667	157,641	391 0
	Total ..	226,844	229,896	2,372	227,524	2,024 0

Area of Forest Tracts protected from fire during the calendar year 1931—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.		
			Area attempted to be protected.	Fires.	Actually protected.			
		ACS.	ACS.	ACS.	ACS.	RS.	A.	P.
	Sixth Circle—cont.							
Mangalore, South.	Special protection. *	283,331·00	286,246·00	3,618·00	282,628·00	1,496	0	0
Wynaad.	Early burning ..	47,935·00	47,935·00	..	47,935·00	69	0	0
	Special protection.	104,306·00	112,646·00	886·00	111,760·00	1,586	0	0
	General protection.	7,060·00	7,530·00	23·00	7,507·00	..		
	Total ..	159,300·00	168,111·00	909·00	167,202·00	1,655	0	0
Nilambur ..	Special protection. *	80,259·00	80,289·00	5·00	80,284·00	3,602	0	0
The Nilgiris.	Special protection. *	77,476·00	87,571·00	638·00	86,936·00	2,514	0	0
	General do.	222,807·00	222,156·00	1,472·00	220,684·00	..		
	Total ..	300,283·00	309,730·00	2,110·00	307,620·00	2,514	0	0
Palghat ..	Special protection. *	114,094·00	116,772·00	2,591·00	114,181·00	2,644	0	0
	General do.	44,432·00	47,380·00	47·00	47,333·00	..		
	Total ..	158,526·00	164,152·00	2,638·00	161,514·00	2,644	0	0
Total, Sixth Circle.	Early burning ..	51,390·00	50,758·00	..	50,758·00	113	0	0
	Special protection.	726,090·00	752,292·00	9,443·00	742,849·00	13,431	0	0
	General do.	431,063·00	435,374·00	2,209·00	433,165·00	391	0	0
	Total ..	1,208,543·00	1,238,424·00	11,652·00	1,226,772·00	13,935	0	0
Parlakimedi Maliahs.	General protection.	107,548·11	112,879·11	1,437·00	111,442·11	402	12	6
Total, Presidency.	Special protection.	2,391,184·00	2,604,729·00	217,994·00	2,386,735·00	32,734	0	0
	Early burning ..	582,862·00	598,414·00	18,002·00	570,412·00	4,146	0	0
	General protection.	6,293,176·00	6,542,570·00	398,978·00	6,143,542·00	6,991	0	0
Grand Total, Presidency ..		9,267,222·00	9,745,713·00	634,974·00	9,100,689·00	43,871	0	0

* No early burning.

Annual Form No. 32.

Forest Department, Madras Presidency.

Area closed and open to grazing during 1931-32.

Districts.	Closed to all animals.		Open to grazing			
			Of all animals except goats.		Of all animals except browsers (sheep and goats).	
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.	Part of year.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
First Circle.	sq. mls.	sq. mls.	sq. mls.	sq. mls.	sq. mls.	
Reserved Forests.						
Ganjam	42	..	583	..	..	..
Vizagapatam	9	..	206	..	59	..
Godavari, Upper ..	58	..	772	..	..	..
Do. Lower ..	96	..	395	..	..	..
Guntur	63	..	219	..	330	..
Nellore	157	185	30	..	..	..
Total ..	425	185	2,205	..	389	..
Reserved Lands.						
Vizagapatam	..	..	2	..	..	..
Godavari, Upper ..	..	..	54	..	..	..
Do. Lower ..	..	..	100	..	..	..
Total ..	..	..	156	..	..	..
Grand Total ..	425	185	2,361	..	389	..
Second Circle.						
Anantapur	40	2	535	2	..	..
Kurnool, East	3	..	942	..	..	..
Do. South ..	34	..	631	..	..	..
Do. West	24	..	830	..	..	..
Cuddapah, North ..	34	..	724	..	..	..
Do. South ..	80	..	591	..	..	..
Total ..	215	2	4,253	2	..	..
Fourth Circle.						
Reserved Forests.						
Chittoor	122	..	456	..	..	..
Vellore	39	..	666	..	..	..
Salem, North	30	..	537	..	..	..
Do. Central	27	..	686	..	..	..
Do. South	5	..	251	..	..	..
Total ..	223	..	2,596	..	..	..

Area closed and open to grazing during 1931-32—*cont.*

Districts.	Closed to all animals.		Open to grazing			
			Of all animals except goats.		Of all animals except browsers (sheep and goats).	
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.	Part of year.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
FOURTH CIRCLE—*cont.*						
Reserved Lands.						
Chittoor	..	..	..	..	..	..
Vellore	..	..	..	..	..	..
Salem, North	..	..	..	..	..	..
Do. Central	..	..	6	..	..	..
Do. South	..	..	30	..	..	..
Total ..	..	..	36	..	..	..
FIFTH CIRCLE.						
Kollegal	3	..	939	..	..	..
Coimbatore, North ..	24	..	808	..	..	..
Do. South ..	241	..	145	..	..	..
Madura	142	..	310	..	195	..
Tinnevelly	245	..	153	..	..	9
Total ...	655	..	2,355	..	195	9
SIXTH CIRCLE.						
Reserved Forests.						
Mangalore, North ..	26	..	333	..	..	..
Do, South ..	11	..	428	..	..	..
Wynaad	2	..	260	..	..	..
Nilambur	108	..	..	..	..	..
The Nilgiris	23	(*a*) 3	458	(*a*) 3	..	..
Palghat	147	..	96	..	10	..
Total ..	317	3	1,575	3	10	..
Reserved Lands.						
Mangalore, South ..	...	..	8	..	..	..
Nilambur	18	..	..	..	..	..
The Nilgiris	..	..	6	..	..	..
Total ..	18	..	14	..	..	..
Grand Total ..	335	3	1,589	3	10	..
Parlakimedi Maliahs * ..	3	..	173	..	..	..
Grand Total, Presidency, Reserved Forests.	1,835	190	12,984	5	594	9
Reserved Lands ..	21	..	379	..	..	..
Total ..	1,856	190	13,363	5	594	9

(*a*) This area was open for grazing from 1st April 1931 to 30th June 1931 and was closed to grazing from 1st July 1931 for one year.

* 2,148 acres comprising 1,440 acres of sal blocks and 708 acres subjected to cultural and other department operations were closed to all animals.

Annual Form No. 33.

Forest Department, Madras Presidency.

Return of Grazing in the State Forests during 1931–32.

Districts.	Grazing on payment—Number of animals. At enhanced or special rates. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals	Fees received.	At full rates. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
First Circle.					Rs.					Rs.
Reserved Forests.										
Ganjam	..	..	..	..	..	(a) 5,223	(a) 33,480	(a) 330	..	8,268
Vizagapatam ..	(b) 182	(b) 2,803	..	..	1,584	(a) 22	(a) 2,996	..	..	570
Godavari, Upper.	..	..	..	..	..	..	..	..	..	..
Do. Lower.	(c) 7,114	(c) 4,459	(c) 89	..	7,024	(a) 332	(a) 6,718	(a) 592	..	(h) 1,440 (h) 1,338
Guntur	(g) 70	(g) 1,266	..	..	1,406	(b) 5,509 (c) 674	(b) 40,474 (c) 3,763	(b) 52,535 (c) 4,145	..	(b) 38,880 (c) 1,347 (h) 699
Nellore	..	..	..	..	..	132	1,301 (k) 36,859	379	..	844 (f) 21,644
Total ..	7,366	8,528	89	..	10,014	11,892	125,591	57,981	..	75,030
Unreserved Lands.										
Rampa	6,711	6,040	..	..	7,298	..	..	70	..	7
Grand Total ..	14,077	14,568	89	..	17,312	11,892	125,591!	58,051	..	75,037

Return of Grazing in the State Forests during 1931-32—*cont.*

District.	Grazing on payment—Number of animals—*cont.*						Grazing free—Number of animals.										
	At privileged rates.						By right under settlement.					During pleasure of Government or otherwise than under settlement.					
					Fees received.												
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Actual.	Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
					RS.	RS.					RS.					RS.	RS.	RS.
FIRST CIRCLE —*cont.*																		
Unreserved Lands —cont.																		
Ganjam ..	..	..	..	..	..	..	(*a*) 483	(*a*) 2,370	..	..	625	402	4,377	654	..	1,032	1,657	9,925
Vizagapatam ..	..	..	..	..	..	..	..	..	..	..	..	(*a*) 577	(*a*) 5,621	(*a*) 10	..	1,271	1,271	3,425
Godavari, Upper.	(*e*) 7,177	(*e*) 47,956	(*e*) 10,182	..	8,425	12,638	..	..	..	..	..	4,936	46,512	33	..	10,575	10,575	23,213
Do. Lower.	(*d*) 473	(*d*) 13,455	..	..	(*d*) 870	2,700	..	..	..	..	..	716	10,847	..	..	2,302	2,302	13,466
Guntur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	42,332
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	(*f*) 22,488
Total ..	7,650	61,411	10,182	..	9,295	15,338	483	2,370	..	..	625	6,631	67,357	697	..	15,180	15,805	1,14,849
Rampa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7,305
Grand Total ..	7,650	61,411	10,182	..	9,295	15,338	483	2,370	..	..	625	6,631	67,357	697	..	15,180	15,805	1,22,154

Note for First Circle—

(*a*) Six annas per buffalo, 3 annas per cow or bullock and 1 anna 6 pies per sheep.
(*b*) One rupee per buffalo, 8 annas per cow or bullock and 4 annas per sheep.
(*c*) Twelve annas per buffalo, 6 annas per cow or bullock and 3 annas per sheep.
(*d*) One anna per buffalo or cow.
(*e*) Four annas per buffalo, 2 annas per cow or bullock and one anna per sheep.
(*f*) Kancha fees realized.
(*g*) One rupee per plough bull.
(*h*) Sale-proceeds of grass.
(*j*) Excludes Rs. 76 being outstandings of previous year.
(*k*) Kancha revenue converted into number of cow units as per instructions in Chief Conservator's Proceeding No. 335, dated 5th December 1924.

Abstract of animals permitted to graze on payment.

Buffaloes.	Cows and bullocks.	Sheep.	Total.
33,619	201,570	68,172	303,361

Return of Grazing in the State Forests during 1931-32—*cont.*

District.	Grazing on payment—Number of animals. At enhanced or special rates. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	At full rates. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
SECOND CIRCLE.										Rs.
Anantapur ..	..	..	..	..	..	(a) 476 (b) 1,655	(a) 14,946 (b) 19,674 (c) 80	(a) 16,796 (b) 14,476 ..	.. .. ..	12,148 11,333 80
Kurnool, East.	..	..	..	..	..	(a) 3,028 (b) 537 (c) 22	(a) 17,682 (b) 9,019 (c) 259	(a) 39,397 (b) 174 (c) 90	.. .. ..	20,961 10,180 84
Do. South.	..	..	..	..	..	Calves. (a) 3,648	(a) 10,882 (b) 2,189	(a) 27,586 ..	.. ..	15,073 2,189
Do. West.	..	..	..	..	..	(a) 5,543 (b) 27	(a) 25,775 (b) 5,739	(a) 37,815 (b) 40	.. (d) 7 (e) 1	26,499 5,821
Cuddapah, North.	..	..	..	..	..	(b) 3,014	(f) 12,903 (g) 14,487	(f) 43,370	..	15,231 14,487
Cuddapah, South.	..	..	..	..	..	(f) 347	(f) 20,192 (g) 3,319	(f) 21,180 ..	.. ..	15,123 ..
Total ..	..	..	..	..	..	18,297	157,146	200,924	8	1,49,209

Return of Grazing in the State Forests during 1931-32—*cont.*

District.	Grazing on payment—Number of animals—*cont.*						Grazing free—Number of animals.										
	At privileged rates.						By right under settlement.					During pleasure of Government or otherwise than under settlement.					
					Fees received.												
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Actual.	Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
SECOND CIRCLE —*cont.*					RS.	RS.					RS.					RS.	RS.	RS.
Anantapur ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23,561
Kurnool, East.	..	..	..	..	..	..	(*b*) 356	(*b*) 894	(*b*) 1,991	..	2,602	..	..	..	..	..	2,602	33,827
Do. South.	..	..	..	..	..	..	..	..	..	..	..	(*a*) 3	(*a*) 43	..	..	24	24	17,521
							(*b*) 25	(*b*) 34	(*b*) 19	..	94	(*b*) 17	(*b*) 107			141	235	
Do. West.	..	..	..	..	..	..	(*a*) 255	(*a*) 875	(*a*) 1,198	..	928	..	..	..	..	..	928	33,248
Cuddapah, North.	..	(*h*) 410 (*i*) 93	(*j*) 335	..	93	251	..	..	..	..	..	..	..	..	..	..	..	29,969
Cuddapah, South.	..	..	..	..	..	..	..	(*k*) 526	..	..	197	..	..	..	..	..	197	15,320
Total ..	..	503	335	..	93	251	636	2,329	3,208	..	3,821	20	150	..	..	165	3,986	1,53,446

Note for Second Circle—

I. Anantapur—
- (*a*) Buffaloes at Re. 1 ; cows at 8 annas ; sheep at 4 annas.
- (*b*) Buffaloes at 12 annas ; cows at 6 annas ; sheep at 3 annas.
- (*c*) Cows at Re. 1.

II 3 Kurnool divisions—
- (*a*) Buffaloes at 12 annas ; cows at 8 annas ; sheep at 4 annas.
- (*b*) Buffaloes at Rs. 2 ; cows at Re. 1 ; sheep at 8 annas.
- (*c*) (Calves) Buffaloes at 6 annas ; cows at 4 annas ; lamb at 2 annas.
- (*d*) Penta horse at Re. 1.
- (*e*) Penta ass at Re. 1.

III. 2 Cuddapah divisions—
- (*f*) Buffaloes at 12 annas ; cows at 6 annas ; sheep at 3 annas.
- (*g*) Cows at Re. 1 (foreign).
- (*h*) Cows at 3 annas.
- (*i*) Cows at 1 anna.
- (*j*) Sheep at ½ anna.
- (*k*) Cows at 6 annas.

Abstract of animals permitted to graze on payment.

	Number.		Number.
Buffaloes	18,297	Other animals ..	8
Cows and bullocks ..	157,146		
Sheep	200,924	Total ..	376,375

Return of Grazing in the State Forests during 1931-32—*cont.*

District.	Grazing on payment—Number of animals.									
	At enhanced or special rates.					At full rates.				
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Sheep.	Other animals.	Fees received.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
					Rs.					Rs.
FOURTH CIRCLE.										
Chittoor	..	..	..	..	..	(a) 108	13,701	6,020	..	8,464
						(b) 590	33,287	5,675	..	13,989
Vellore	..	(c) 3,257	..	..	3,257	(a) 486	51,227	17,040	..	30,360
Salem, North ..	..	..	..	..	..	(e) 1,504	55,841	756	..	29,237
								(b) 2,286	..	429
Do. Central ..	..	(c) 12,347	..	..	12,347	(g) 73	31,125	3,563	..	18,592
						(a) 42	30,723	1,168	..	15,696
						(b) 158	..	14,070	..	2,757
Do South ..	..	..	..	..	..	(g) 5	17,144	20,784	..	15,495
							(b) 7,041	1,585	..	2,938
Total ..	..	15,604	..	..	15,604	2,966	240,089	72,947	..	1,37,957

Return of Grazing in the State Forests during 1931-32—*cont.*

District.	Grazing on payment—Number of animals—*cont.*						Grazing free—Number of animals.											
	At privileged rates.						By right under settlement.					During pleasure of Government or otherwise than under settlement.					Total value of fees at full rates.	Grand total of value at full rates.
					Fees received.													
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Actual.	Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.		
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
FOURTH CIRCLE —*cont.*					Rs.	Rs.					Rs.							Rs.
Chittoor ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22,453
Vellore ..	(*b*) 6	186	41	..	82	109	..	..	..	..	..	..	..	..	..	..	..	..
	(*d*) 4,150	29,256	6,028	12	7,609	20,291	..	..	..	..	..	..	..	..	..	..	..	54,017
Salem, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	(*f*) 29,666
Do. Central ..	..	12,617	..	..	(*h*) 1,577	7,097	..	..	..	..	..	..	..	..	..	..	..	56,489
Do. South ..	..	..	..	..	..	..	..	(*g*) 248	..	..	139	..	..	..	..	..	..	18,572
Total ..	4,156	42,059	6,069	12	9,268	27,497	..	248	..	..	139	..	..	..	..	..	..	1,81,197

Note for Fourth Circle—

One buffalo = 2 cows = 4 sheep.

(*a*) Eight annas per cow unit.
(*b*) Six annas per cow unit.
(*c*) One rupee per cow unit.
(*d*) Three annas per cow unit.
(*e*) Twelve annas per buffalo, eight annas per cow, four annas per sheep.
(*f*) Excludes Rs. 2 realized by sale of fodder grass.
(*g*) Nine annas a cow unit.
(*h*) Grazing assessment for 12,617 cow units at two annas per cow unit in Atur and Harur ranges.

Abstract of animals licensed to graze on payment—

Buffaloes.	Cows or bullocks.	Sheep.	Other animals.	Total.
7,122	297,752	79,016	12	383,902

Return of Grazing in the State Forests during 1931-32—*cont.*

District.	Grazing on payment—Number of animals.											
	At full rates.					At privileged rates.						
										Fees received.		
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Actual.	Value at full rates.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
FIFTH CIRCLE.					RS.					RS. A. P.	RS. A. P.	
Kollegal ..	3,786	78,984	5,778	..	(c) 44,722	..	..	..	..	..	..	
Coimbatore, North. ..	2,968	55,488	10,679	..	(e) 33,382	..	(d) 9	..	..	1 2 0	4 8 0	
Coimbatore, South.	(a) 235	(b) 7,861	280	..	4,279	..	..	..	..	..	..	
Madura	156	28,020	6,049	..	(f) 21,276	..	..	..	..	..	..	
Tinnevelly ..	295	10,378	7,206	..	7,286	..	..	..	..	..	..	
Total ..	7,440	180,731	29,992	..	1,10,945	..	9	..	..	1 2 0	4 8 0	

Note for Fifth Circle—

(a) Includes 4 buffaloes at Rs. 2-8-0 each in Punachi Range instead of Re. 1.
(b) Includes 19 bulls or cows at Rs. 2-8-0 each in Punachi Range instead of As. 8.
(c) Permission granted for free grazing of 30 bulls and cows within the Yelumalayan coil enclosure (South Coimbatore district).
(d) One-fourth fee for renewal of lost permit, i.e., As. 2 a permit.
(e) Excludes Rs. 1,104 realized by sale of fodder grass and Rs. 175 erroneously credited to this head in August 1931.
(f) Excludes Rs. 38 erroneously credited to this head. An alteration memorandum has been sent to Accountant-General by District Forest Officer to alter credit.

Return of Grazing in the State Forests during 1931-32—*cont.*

District.	Grazing free—Number of animals—*cont.*											Grand total of value at full rates.
	By right under settlement.					During pleasure of Government or otherwise than under settlement.						
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
FIFTH CIRCLE —*cont.*					Rs.							Rs.
Kollegal ..	..	..	..	..	..	..	..	..	..	..	..	44,722
Coimbatore, North.	..	..	..	..	..	..	..	..	..	..	..	33,386
Coimbatore, South.	..	(*e*) 30	..	..	15	..	..	..	..	..	..	4,294
Madura ..	655	4,906	378	144	1,637	..	..	..	..	..	..	22,913
Tinnevelly ..	..	..	..	..	..	..	..	..	..	..	..	7,286
Total ..	655	4,936	378	144	1,652	..	..	..	..	..	..	1,12,601

Note.—(1) Full or nominal rate for Kollegal, North and South Coimbatore and for all ranges in Tinnevelly division, at Re. 1 per buffalo, As. 8 per cow or bullock and As. 4 per sheep.

(2) Part of Kodaikanal range, Madura district, at As. 8 a buffalo, As. 4 a cow and As. 2 for sheep.

(3) Part of Kodaikanal, Palni, Cumbum, Natham and Ayyalur Ranges excluding old Vaiyampatti at Rs. 1-8-0 a buffalo, As. 12 a cow and As. 6 for sheep.

(4) Ayyalur range portion (old Vaiyampatti range), at Rs. 2 a buffalo, Re. 1 for cow and As. 8 for sheep.

(*e*) Excludes Rs. 2 erroneously credited to this head.

Abstract of Animals—

	Rs.
Buffaloes	7,440
Cows and bulls ..	1,80,731
Sheep	29,992
Total ..	2,18,163

Return of Grazing in the State Forests during 1931-32—*cont.*

Grazing on payment—Number of animals.

District.	At enhanced or special rates.				At full rates.					At privileged rates.	
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals. (cow calves and asses).	Fees received.	Buffaloes.	Cows and bullocks.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
SIXTH CIRCLE.				Rs.					Rs.		
Reserved Forests.											
Mangalore, North.	..	..	..	..	1,329	12,109	..	..	5,372	..	..
Do. South.	..	(a) 14,316	..	1,790	2,400	17,729	..	..	8,148	..	..
Wynaad ..	..	..	..	..	1,981	3,554	..	..	3,758	..	..
Nilambur ..	(b) ..	..	..	..	..	..	..	..	..	..	..
The Nilgiris {	..	449	..	225	7,165	12,973	2,256	(d) 29	5,333	..	..
	(c) ..	7,100	33,000	177	..	..	..	..	..	..	..
Palghat	1	768	..	770	40	3,685	1,440	(e) 132	2,308	..	..
Total ..	1	22,633	33,000	2,962	12,915	50,050	3,696	161	24,919	..	..
Reserved Lands.											
The Nilgiris ..	..	..	..	..	..	..	..	..	..	..	..

(a) Includes buffaloes. (b) No grazing allowed. (c) Slaughter cattle. (d) Cow calves. (e) Asses.

Per each head of

	Buffalo.	Cow and bullock.	Sheep.
Full rates—	Rs. A. P.	Rs. A. P.	Rs. A. P.
North and South Mangalore	0 10 0	0 6 0	..
Wynaad and Palghat	1 0 0	0 8 0	0 4 0
The Nilgiris	0 6 0	0 3 0	0 1 6

Abstract of animals permitted to graze on payments—

Buffaloes	12,916
Cows and bullocks	72,683
Goats and sheep	36,696
Other animals	161
	122,456

Enhanced rates—

South Mangalore—Cattle admitted to Kulgunda cattle fair at As. 2 each.

The Nilgiris ..
- Buffaloe, Re. 1 each.
- Cow, As. 8 each.
- Slaughter cattle cow, As. 3 per 50 per day; sheep, As. 1½ per 50 per day.

Palghat ..
- Buffaloes, Rs. 2 each.
- Cow or bullock, Re. 1 each; sheep, As. 8 each.

Return of Grazing in the State Forests during 1931-32—*cont.*

District.	Grazing on payment—Number of animals—*cont.*				Grazing free—Number of animals.										
	At privileged rates—*cont.*				By right under settlement.					During pleasure of Government or otherwise than under settlement.					
			Fees received.											Total value of fees at full rates.	Grand total of value at full rates.
	Goats and sheep.	Other animals.	Actual.	Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27) Rs.	(28) Rs.
Sixth Circle —*cont.*															
Reserved Forests —cont.															
Mangalore, North	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5,372
Mangalore, South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9,938
Wynaad	..	..	..	..	..	..	..	..	..	7	110	..	..	..	62	3,820
Nilambur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
The Nilgiris.	..	..	..	..	..	..	..	..	..	261	245	..	..	..	144	5,879
Palghat ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	83	..	..	..	42	3,120
Total ..	..	..	..	..	..	..	..	..	..	268	438	..	..	..	248	28,129
Reserved Lands.															
The Nilgiris ..	..	..	..	..	..	..	..	..	..	1,567	..	..	..	..	588	588

Return of Grazing in the State Forests during 1931–32—*cont.*

District.	Grazing on payment—Number of animals.											
	At enhanced or special rates.					At full rates.					* At privileged rates.	
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
					Rs.					Rs. A. P.		
Parlakimedi Maliahs ..	..	..	..	..	..	2,398	2,369	151	..	1,357 9 6	..	..
Total, Departmental Forests—Reserves ..	7,367	46,765	33,089	..	28,580	53,510	753,607	365,540	169	4,98,060 0 0	11,806	103,982
Unreserves ..	6,711	6,040	..	..	7,298	2,398	2,369	221	..	1,365 0 0	..	..
Grand Total ..	14,078	52,805	33,089	..	35,878	55,908	755,976	365,761	169	4,99,425 0 0	11,806	103,982
Total, Panchayat Forests	871	111,298	5,874	..	13,045	20,788	258,780	444,698	..	2,55,605 0 0	4,245	14,984
Grand Total, Presidency.	14,949	164,103	38,963	..	48,923	76,696	1,014,756	810,459	169	7,55,030 0 0	16,051	118,966

Return of Grazing in the State Forests during 1931-32—*cont.*

District.	Grazing on payment—Number of animals—*cont.*				Grazing free—Number of animals.											
	At privileged rates—*cont.*				By right under settlement.					During pleasure of Government or otherwise than under settlement.						
			Fees received.													
	Goats and sheep.	Other animals.	Actual.	Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
			Rs.	Rs.					Rs.					Rs.	Rs.	Rs. A. P.
Parlakimedi Maliahs.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,357 9 6 or 1,358 0 0
Total, Departmental Forests —Reserves ..	16,586	12	18,656	43,091	1,774	9,883	3,586	144	6,234	6,919	67,945	697	..	15,345	20,039	5,90,222 0 0
Unreserves ..	..	..	..	..	..	..	..	..	..	1,567	..	..	..	..	588	9,251 0 0
Grand Total ..	16,586	12	18,656	43,091	1,774	9,883	3,586	144	6,234	8,486	67,945	697	..	15,345	20,627	5,99,473 0 0
Total, Panchayat Forests.	33,906	..	16,845	14,133	10	824	466	..	606	115	477	..	..	133	..	2,85,626 0 0
Grand Total, Presidency.	50,492	12	35,501	57,224	1,784	10,707	4,052	144	6,840	8,601	68,422	697	..	15,478	20,627	8,85,099 0 0

Genuine inhabitants of the Agency except professional graziers are permitted to graze cattle free of charge and without licence on permit.

	A.	P.	
* Buffaloes at	6	0	per head.
Cows at	3	0	,,
Sheep at	1	6	,,

Note.—Grazing on payment at enhanced or special rates is nil.

Abstract of Animals permitted to graze on payment in Reserved Forests and Reserved Lands.

Circle.	Buffaloes.	Bullocks and cows.	Sheep.	Other animals.	Total.
First Circle ..	33,619	201,670	68,172	..	303,361
Second ,, ..	18,297	157,146	200,924	8	376,375
Fourth ,, ..	7,122	297,752	79,016	12	383,902
Fifth ,, ..	7,140	180,731	29,992	..	218,163
Sixth ,, ..	12,916	72,683	36,696	161	122,456
Parlakimedi Malahs.	2,398	2,369	151	..	4,918
Total, Departmental Forests	81,792	912,251	414,951	181	1,409,175
Panchayat Forests ..	25,904	385,068	484,478	..	895,450
Grand Total ..	107,696	1,297,319	899,429	181	2,304,625

ANNUAL

Forest Department,

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during period.	Method of treatment.	Area on which regeneration was in progress at commencement of year (1st April 1931).
(1)	(2)	(3)	(4)	(5)	(6)
FIRST CIRCLE.		YRS.	ACS.		ACS.
Ganjam	Plains Sal Timber Working Circle.	1930-31 to 1939-40	1,859	Clear felling and regeneration.	..
	Ravine Working Circle.	1930-31 to 1939-40	803	Do.	..
Vizagapatam	Sal Working Circle.	1927-28 to 1961-62	681	Do.	13
Godavari Lower ..	Casuarina Plantation, Kandikuppa Reserved Forest.	1924-25 to 1933-34	682	Planting up with seedlings, 7'×7'.	54
Nellore	Casuarina Working Circle, Srihari-kota Range.	1929-30 to 1938-39	500	Do.	..
		Total ..	4,525		67
SECOND CIRCLE.					
Kurnool West Division under the new Nallamalais Working Plan —Pending sanction.					
1. Gundlabrahmeswaram Range.	High Forest Working Circle, Gundlabrahmeswaram series.	10 years.	10	Clear felling and artificial Regeneration.	15·00
2. Do.	....	..	..	Maintenance of nursery of teak.	..
3. Nandyal Range ..	High Forest Working Circle, Ramannapenta series.	10 years.	10	Clear felling and artificial regeneration.	15·00
4. Do. ..	....	..	..	Maintenance of nursery of teak.	..
5. Gundlabrahmeswaram Range.	Pole Working Circle, Pole coupes of Sudem Pangidi and Rudraoode series.	10 years.	..	Clearing bamboo regrowth heaping and burning, reburning sowing and stacking of seedlings.	200·00
		Total ..	20		230·00

FORM No. 34-A.

Madras Presidency.

Plans or Schemes during the year 1931-32.

Area on which regeneration commenced during the year (1st April 1931 to 31st March 1932).	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1932).	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year (1st April 1931 to 31st March 1932).	Total to 31st March 1932.		Creation.	Upkeep.	Creation.	Upkeep.		
(7) ACS.	(8) ACS.	(9) ACS.	(10) ACS.	(11) ACS.	(12) RS.	(13) RS.	(14) RS.	(15) RS.	(16) RS.	(17) RS.
51	201	51	252	..	224	1,167	988	2,436	..	..
50	115	50	165	..	520	457	1,018	779	..	..
..	97	13	110	..	46	60	78	228	..	..
120	409	100	509	74	1,268	974	11,601	2,541	440	3,800
60	102	60	162	..	1,255	496	3,329	989	..	..
281	924	274	1,198	74	3,313	3,154	17,014	6,973	440	3,800
..										
..										
10·00	..	..	..	25·00	..	301	..	503	..	..
..										
..	..	..	..	..	96	..	96	..	..	..
10·00	..	..	..	25·00	..	267	..	458	..	..
..	..	..	..	..	90	..	90	..	..	..
153·00	..	..	..	353·00	..	40	..	408	..	..
173·00	..	..	..	403·00	186	608	186	1,369	..	..

NOTE.—Period and area shown in columns (3) and (4) of 1930-31 return in respect of Ganjam were wrong, as these are for the old Working Plan, whereas the figures now furnished are for the new Working Plan which came into force from 1930-31.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was in progress at commencement of year (1st April 1931).
(1)	(2)	(3)	(4)	(5)	(6)
FOURTH CIRCLE.		YRS.	ACS.		ACS.
Chittoor.	Sandal Regeneration Working Circle.	1st April 1931 to 31st March 1932.	100	Sandal seeds to be dibbled by subordinates.	306
	Timber Regeneration Working Circle — Compartment IV of Mamandur Range.	Do.	1,391	Early burning, cutting back seedlings, cutting creepers and sowing seeds of red sanders.	652·1
	Total ..	..	1,491	..	958·1
Vellore.	Virinjipuram Working Circle.	1888-89 to 1931-32.	Blanks in felled coupes.	Dibbling of seeds of timber species.	..
	Chenur Working Circle.	Do.	Do.	Do.	..
	Kilminnal Working Circle.	Do.	Do.	Do.	..
	Tiruvallam Working Circle.	Do.	Do.	Do.	..
	Total ..	..	..	..	..
Central Salem.	Kurumbapatti palmyra tope.	16 years from 1926-27.	379	Sowing palmyra seeds.	..
	Jallutha Working Circle.	1927-28.	114	1. Felling of fuel coupes under simple coppice. 2. Sowing of seeds of indigenous species in blank areas.	..

Plans or Schemes during the year 1931-32—*cont.*

Area on which regeneration commenced during the year (1st April 1931 to 31st March 1932).	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1932).	Expenditure during year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During the year (1st April 1931 to 31st March 1932).	Total to 31st March 1932.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
100	..	..	..	406	..	..	..	..	..	..
50	..	..	..	702·1	1,017	..	2,024	..	..	..
150	..	..	..	1,108·1	1,017	..	2,024	..	..	..
..	283	..	283	..	..	(a) 450 (b) 3 (c) 24 (d) 6	9,552	58,169	944	47,706
..	142	..	142	..	..	(a) 428	4,623	5,338	304	7,977
..	104	..	104	..	..	(a) 244 (b) 3 (c) 9 (d) 2	3,157	27,655	1,440	36,393
..	111	..	111	..	..	(a) 710 (b) 3 (c) 8 (d) 8	7,319	62,796	600	37,777
..	640	..	640	..	..	1,898	24,651	1,53,958	3,288	1,29,853
32	107	32	139	..	64	..	506	..	322	1,864
..	114	..	114	..	..	..	..	..	..	..

(a) Pay of establishment.
(b) Marking trees for felling.
(c) Collection of Divi Divi pods.
(d) Collection of Kodukapuli seeds.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was in progress at commencement of year (1st April 1931).
(1)	(2)	(3)	(4)	(5)	(6)
FOURTH CIRCLE—*cont.*		YRS.	ACS.		ACS.
Central Salem—cont.	Chitteri Timber Working Circle.	1931-32	..	Sowing of teak, Pterocarpus marsupium, rosewood.*	..
	Kottapatti Timber Working Circle.	1931-32	..	Sowings of Terminalia arjuna, mangifera indica, along streams and Hardwickia latifolia or Chloroxylon swietenia in coupes just felled. †	3
	Fuel Working Circle—				
	Atur .. 64				
	Harur .. 16				
	Shevaroys, North .. 13	1931-32	..	Sowing seeds of principal fuel species in burnt patches.	108
	Shevaroys, South .. 9				
	Cauvery .. 6				
	Total .. 108				
	Sandalwood Working Circle—				
	Shevaroys, North .. 3				
	Atur .. 15				
	Harur .. 21	1931-32	..	Sowing sandal seeds in 10 acres of each coupe.†	55
	Shevaroys, South .. 11				
	Cauvery .. 5				
	Total .. 55				
	Total ..	..	493		166
	Grand Total ..	..	1,984		1,124·1

* As per revised consolidated working plan for the division.
† As per revised consolidated working plan for the division. Sowings were done freely by the subordinates.

Plans or Schemes during the year 1931-32—*cont.*

Area on which regeneration commenced during the year (1st April 1931 to 31st March 1932).	Area in which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1932).	Expenditure during year.		Expenditure from commencement of period.			
	Previous.	During the year (1st April 1931 to 31st March 1932).	Total to 31st March 1932.		Creation.	Upkeep.	Creation.	Upkeep.	Revenue during the year.	Total revenue from date of creation.
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
..	..	..	..	..	..	..	..	..	..	..
..	..	3	3	..	..	..	..	..	..	..
..	..	108	108	..	..	..	..	..	..	..
..	..	55	55	..	..	..	..	..	..	† ..
32	221	198	419	..	64	..	506	..	322	1,364
182	861	198	1,059	1,108·1	1,081	1,898	27,181	1,53,958	3,610	1,31,217

Note for Central Salem—Fourth Circle.—Items relating to Sanniasimalai and Shevaroys Central Working Circles shown in last year's return have now been shown in Form 34 B, as they are not covered by the new working plan for the division.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was in progress at commencement of year (1st April 1931).
(1)	(2)	(3)	(4)	(5)	(6)
FIFTH CIRCLE.					
South Coimbatore.		YRS.	ACS.		ACS.
..		1919 ..	..	Clearing, burning and dibbling teak and other seeds.	..
		1920 ..	.. ..		..
		1921 ..	..		..
		1922 ..	..		..
		1923 ..	..		..
		1924 ..	..		..
..	.. ..	1925 ..	..		..
Regeneration area..	..	1926 ..	..		..
		1927 ..	..		..
		1928 ..	..		..
		1929 ..	..		..
		1930 ..	..		..
		1931 ..	..		103
		1932 ..	92		..
Waterfall Plantation.	....	..	..	..	..
Experimental Plantation at Mount Stuart.	....	1916 ..	..	..	..
Experimental Plantation at Karian Shola.	.. ..	..	..	..	..
Experimental Plantation at Topslip.	....	..	..	..	..
Planting Eucalyptus seedlings from nursery pits round Topslip.	....	..	..	..	..
Undersowing Artocarpus Hirsuta.	....	..	..	..	..
Formation of Hopea nurseries.	....	..	..	..	..
Formation of gap regeneration area.	....	1931 ..	..	..	..
Do.	....	1932 ..	..	..	..
Formation of nurseries.	....	..	..	..	..
Formation of nurseries for providing plants in 1933.	....	..	..	..	..

	Rs.
Note.—Total expenditure on regeneration	10,612
Deduct amount to be adjusted to Mount Stuart commercial concern after final audit	— 1,231
Total ..	(a) 9,381

Plans or Schemes during the year 1931-32—*cont.*

Area on which regeneration commenced during the year (1st April 1931 to 31st March 1932).	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1932).	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During the year (1st April 1931 to 31st March 1932).	Total to 31st March 1932.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.		
..	29	..	29	..	..	..	643	826	..	..
..	8	..	8	..	..	..	584	576	..	..
..	29	..	29	..	..	..	545	1,267	..	..
..	126	..	126	..	..	..	3,358	4,303	..	..
..	194	..	194	..	..	..	5,055	5,729	..	..
..	226	..	226	..	..	..	6,459	4,883	..	..
..	260	..	260	..	..	..	9,986	6,531	..	..
..	251	..	251	..	..	..	15,251	1,798	..	..
..	155	..	155	..	..	129	5,405	5,360	..	..
..	144	..	144	..	..	129	4,124	4,179	..	..
..	151	..	151	..	..	126	4,133	4,158	..	..
..	224	..	224	..	* 606	2,829	5,848	8,022	..	..
..	..	103	103	..	885	2,217	4,134	2,217	..	..
92	..	..	..	92	2,025	..	2,025	..	..	..
..	12	..	12	..	..	..	..	..	..	..
..	5	..	5	..	..	..	..	78	..	..
..	1	..	1	..	..	..	..	93	..	..
..	10	..	10	..	..	..	31	..	..	..
..	..	..	..	..	..	..	57	..	..	..
..	..	..	..	..	..	..	22	..	..	..
..	..	..	..	..	..	..	15	..	..	..
..	..	..	..	..	381	..	743	..	..	..
..	..	..	..	..	51	..	51	..	..	..
..	..	..	..	..	1,024	..	1,153	..	..	..
..	..	..	..	..	210	..	210	..	..	..
..					5,182	5,430	69,862	50,020		

	RS.
(a) Excludes cost of collecting seeds	431
Excludes clearing inspection path	50
Excludes enumeration of trees in sample plot	3
	484

* Expenditure incurred in re-forming. † Abandoned.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area in which regeneration was in progress at commencement of year (1st April 1931).
(1)	(2)	(3)	(4)	(5)	(6)
FIFTH CIRCLE —*cont.*		YRS.	ACS.		ACS.
SOUTH COIMBATORE —*cont.*					
Regeneration plots in compartments IX and X.	Punachi Working Circle.	..	..	..	..
Two-acre plot in compartment II.		..	..	..	..
Three-acre plot in compartment XV.		..	..	..	..
Regeneration area in compartments XIV and XVI.		1924	..	..	..
Ten-acre plot in compartment XV.		..	..	..	..
Regeneration area in coupes XII and XIII.		1925	..	..	..
Periodic block ..		1925-26	..	..	..
Do. ..		1926-27	..	..	..
Do. ..		1928	..	..	..
Do. ..		1929	..	..	..
Do. ..		1930	..	..	..
Do. ..		1931	..	..	* 36
Do. ..	..	1932	25	..	..
Gap regeneration in Ulandi range.	..	..	..	..	..
NORTH COIMBATORE.					
Mettupalayam range.	Mannar Working Circle.	..	..	Dibbling sandal seeds.	..
Jaccaneri Sandal compartment.	..	..	..	Do	..
MADURA.					
Vannathiparai Cumbum Valley experimental scheme.	..	5 years from 1927-28 to 1932-33.	..	Artificial regeneration of teak, rosewood, etc.	..
		Total ..	117		139

* The actual area regenerated is 36 acres.

Plans or Schemes during the year 1931-32—*cont.*

Area on which regeneration commenced during the year (1st April 1931 to 31st March 1932).	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1932).	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During the year (1st April 1931 to 31st March 1932).	Total to 31st March 1932.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.		RS.
..	5	..	5	..	..	..	86	128	..	..
..	2	..	2	..	..	..	75	126	..	..
..	3	..	3	..	..	..	146	98	..	..
..	25	..	25	..	..	66	524	1,286	..	..
..	10	..	10	..	..	..	245	404	..	..
..	25	..	25	..	..	..	431	25	..	..
..	25	..	25	..	..	19	327	143	..	..
..	25	..	25	..	..	15	22	198	..	..
..	25	..	25	..	..	23	185	143	..	..
..	25	..	25	..	..	46	160	72	..	..
..	25	..	25	..	..	45	200	98	..	..
..	..	36	36	..	21	108	190	108	..	..
25	..	..	..	25	135	..	135	..	..	..
					156	322	2,726	2,829	..	..
..	..	..	..	..	197 †	..	197	..	..	..
..	132	..	132	..	..	..	69	75		..
..	108	..	108	..	..	..	30	..	..	..
..	23	..	23	..	..	225	1,296	367	..	3,753
117	2,283	139	2,422	117	5,535	5,977	74,180	53,291	..	3,753

† Excludes Rs. 155 spent on 5-acre sandal plot, Rs. 88 on creeper cutting and Rs. 21 on sandal seed collection.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was in progress at commencement of year (1st April 1931).
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE.					
		YRS.	ACS.		ACS.
Mangalore, North.	Coupe I Catechu working series in Baindur and Wandse.	1926-27	375 acres in coupe I of Baindur and 180 acres in coupe I of Wandse series.	Fencing and sowing Acacia Sundra (catechu) at stakes 12' × 12' in filled pits 1' × 1' × 1'.	120 acres (51 in coupe I Baindur and 69 acres in coupe II, Baindur).
	Coupe II Catechu working series.	1927-28	580 acres in Baindur coupe II and 785 acres in Wandse coupe II.		75 acres in coupe II, Baindur.
	Coupe III Catechu working series.	1928-29	550 acres in coupe III Baindur and 1,030 acres in coupe III, Wandse.		13 acres in coupe III, Baindur and 76 acres in coupe III, Wandse.
	Coupe IV of Wandse Catechu working series.	1929-30	1,470 acres in coupe IV of Wandse series.		84 acres in coupe IV of Wandse series.
	Coupe V of Baindur Catechu working series.	1931-32	33 acres in coupe V of Baindur series.		33 acres in coupe V of Baindur series.
	Coupes V and VI of Baindur Catechu working series.	1931-32	36 acres in coupes V and VI of Baindur		36 acres in coupes V and VI of Baindur series.
	Total ..		5,039		387

Plans or Schemes during the year 1931-32—*cont.*

Area on which regeneration commenced during the year (1st April 1931 to 31st March 1932).	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1932).	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During the year (1st April 1931 to 31st March 1932).	Total to 31st March 1932.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
				ACS.	RS.	RS.	RS.	RS.		
..	..	..	..	120	..	11	352	448	..	..
..	..	..	..	75	..	12	396	418	..	..
..	..	..	..	13	..	13	86	103	..	.
..	..	..	..	76	..	45	440	258	..	..
..	..	..	..	34	..	26	306	80	..	..
..	..	..	..	33	180	..	180	..	..	..
..	..	..	..	86	197	..	197	..	..	..
..	..	..	..	387	377	107	1,957	1,307	..	..

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was in progress at commencement of year (1st April 1931).
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE—*cont.*		YRS.	ACS.		ACS.
Wynad	Experimental working circle, Begur and Chedleth ranges.	1892-93 to 1929-30	(*a*) 1,551	Regular planting and Taungya planting.	..
	Cultural operations in Begur and Chedleth ranges.	..	..	Patch regeneration by dibbling seeds.	..
	Clear-felling working circle in Begur and Chedleth ranges.	1929-30 to 1938-39	(*a*) 1,500	Concentrated regeneration by stump planting.	(*b*) 150
	Selection felling working circle felling series I and III, Begur and Chedleth ranges.	1929-30 to 1938-39.	(*a*) 6,924	Patch regeneration by dibbling and stump planting.	(*b*) 688
	Selection felling working circle felling series.	..	..	Taungya planting.	..
	Improvement felling working circle in Sultan's Battery range.	..	..	Taungya planting and dibbling.	..
				Patch planting and dibbling.	..
	Total ..		9,975		838
Nilambur	Plantation working circle.	1928-29 to 1937-38.	1,290	Artificial ..	87
	Conversion working circle.	Do.	2,209	Do. ..	276
	Beypore Coconut tope.	1931-32	..	Do. ..	..
	Total ..		3,499		363
The Nilgiris ..	Mudumalai clear-felling working circle.	1927 to 1937.	300	Artificial .. regeneration.	20
	Do.	Do.	105 (one acre per 100)	Dibbling sandal seed.	24
.. ..	Sandal area, Segur range.	1931-32	25	Do.	..
	Sandal area, Coonoor range.	Do.	25	Do.	..

(*a*) Total area provided in the Working Plan.

(*b*) Correct area found on actual survey now adopted.

(*c*) Patch or gap regeneration done in Begur and Chedleth ranges from 1914-15 to 1921-22 now shown in this return as the patches lie in the area covered by the Working Plan.

Plans or Schemes during the year 1931-32—*cont.*

Area on which regeneration commenced during the year (1st April 1931 to 31st March 1932.)	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1932).	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During the year 1st April 1931 to 31st March 1932.	Total to 31st March 1932.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS	RS.	RS.
..	(*b*) 1,393	..	1,393	..	..	2,836	58,386	56,974	5,468	34,193
..	(*c*) 227	..	227	..	..	..	1,924	160	..	..
83	(*b*) 148	(*b*) 150	298	83	4,636	2,071	17,528	2,071	..	..
(*d*) ..	(*b*) 565	(*b*) 688	1,253	(*d*) ..	418	12	899	12	..	..
7	29	7	36	..	52	240	177	240	..	..
..	10	..	10	..	..	11	107	128	..	..
..	2	..	2	..	..	20	67	108	..	..
90	2,374	845	3,219	83	5,106	5,190	79,088	59,693	5,468	34,193
(*e*) 247	439	265	704	69	6,470	..	(*f*) 22,799	..	..	..
177	452	265	717	.. 188	10,634	..	42,447	..	..	..
..	37	..	37	..	..	2,000	884	18,363	..	..
424	928	530	1,458	257	17,104	2,000	66,130	18,363	..	..
40	57·5	40	97·5	20	1,761	316	5,052	602	473	3,449
5	6	5	11	24	44	68	224	77	..	..
5	75	5	80	..	18	..	201	..	..	..
5	75	5	80	.. ..	14	..	249	68	..	..

(*d*) As coupe III selection in both the ranges—Begur and Chedleth—has not been felled completely for marketable timber, some fresh patches in coupe I alone are being regenerated.

(*e*) Includes 14·4 acres (Educode Compartment 80) regenerated by the Provincial Sylviculturist, Ootacamund.

(*f*) Includes Rs. 374 spent by the Provincial Sylviculturist, Ootacamund.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was in progress at commencement of year (1st April 1931).
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE —*cont.*		YRS.			
The Nilgiris—*cont.*					
	Nilgiris plantations and Aramby, Block V, compartment 17 B.	1931-32 ..	..	..	..
	Baikie, Block IV, compartment I.	Do. ..	..	..	..
	Snowdon, Block III, compartment 2 B.	Do. ..	..	..	..
	Snowdon, Block III, compartment 3.	Do. ..	..	..	..
	Brooklands, compartment 3.	Do. ..	..	Artificial regeneration by planting *Eucalyptus eugenoides.*	..
	Springfield, compartment 2	Do. ..	..	Do.	..
	Springfield, compartment 3.	Do. ..	..	Do.	..
	Springfield, compartment 4.	Do. ..	..	Do.	..
	Springfield, compartment 5.	Do. ..	..	Do.	..
	Coonoor Peak, Block II, compartment 2 A.	Do. ..	..	Artificial regeneration with *Eucalyptus globulus.*	..
	Governorshola, Block IV, compartment 4.	Do. ..	..	Do.	..
	Governorshola, Block IV, compartment 1.	Do. ..	..	Do.	..
	Cairnhill Block I, compartment 9 (*b*).	Do. ..	..	Do.	..
	Marlimund, Block III, compartment 1.	Do. ..	..	Do.	..
	Aramby, Block VII, compartment 3.	Do. ..	..	Do.	..
	Brooklands, compartment 4.	Do. ..	..	Do.	..

Plans or Schemes during the year 1931-32—*cont.*

Area on which regeneration commenced during the year (1st April 1931 to 31st March 1932).	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1932).	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year (1st April 1931 to 31st March 1932).	Total to 31st March 1932.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	ACS.		ACS.			RS.	RS.	RS.		
..	3·7	..	3·7	..	..	..	95	12	..	..
..	1 5	..	1·5	..	..	..	27	..	..	..
..	4 5	..	4 5	..	..	..	4	..	..	..
..	1	..	1	..	..	..	10	..	..	..
..	5	..	5	..	..	..	211	33	..	..
..	5·2	..	5·2	..	..	..	145	28	..	..
..	5·2	..	5·2	..	..	..	141	23	..	..
..	5·8	..	5·8	..	..	..	120	29	..	..
..	5·8	..	5·8	..	..	..	125	30	..	..
..	3·2	..	3·2	..	..	..	36	..	..	..
..	6·4	..	6·4	..	..	..	52	..	..	..
..	10	..	10	..	..	..	178	30	..	..
..	3·4	..	3·4	..	..	..	45	2	..	..
..	3·7	..	3·7	..	..	..	42	6	..	..
..	3	..	3	..	..	..	46	4	..	..
..	5·3	..	5·3	..	..	64	195	301	..	..

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area in which regeneration was in progress at commencement of year (1st April 1931).
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE —*cont.*		YRS.	ACS.		
The Nilgiris—*cont.*					
.. ..	Coonoor Peak, Block II, compartment 2 B.	1931-32 ..	..	Artificial regeneration with *Eucalyptus Globulus.*	..
	Tigerhill Reserved Forest.	Do. ..	..	Do.	..
	Bleakhouse, compartment 1.	Do. ..	..	Artificial regeneration with *Eucalyptus pillularis.*	..
	Aramby, Block VII, compartment 3 (*b*).	Do. ..	..	Artificial regeneration with *Eucalyptus Globulus.*	..
	Cairnhill Block I, compartment 9 (*b*) ii.	Do. ..	..	Do.	..
	Brooklands, compartment 5.	Do. ..	..	Artificial regeneration with *Eucalyptus pillularis.*	..
	Aramby, Block VII, compartment 3 (*c*).	Do. ..	2·97	Artificial regeneration with *Eucalyptus Globulus.*	..
	Cairnhill, Block I, compartment 4 (*a*).	Do. ..	3·40	Do.	..
	Coonoor Peak, Block II, compartment 2 (*c*).	Do. ..	3·16	Do.	..
	Brooklands, compartment 6.	Do. ..	5·00	Artificial regeneration with *Eucalyptus pillularis.*	..
	Bleakhouse, compartment 2.	Do. ..	6·37	Do.	..
		Total ..	475·9	..	44

Plans or Schemes during the year 1931-32—*cont.*

Area on which regeneration commenced during the year (1st April 1931 to 31st March 1932).	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1932).	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year (1st April 1931 to 31st March 1932).	Total to 31st March 1932.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.		RS.	RS.	RS.	RS.	RS.	RS.
..	3·2	..	3·2	..	..	..	38	..	..	..
..	12	..	12	..	..	42	167	42	..	..
..	7·6	..	7·6	..	..	43	170	43	..	..
..	3	..	3	..	..	1	33	1	..	..
..	3·5	..	3·5	..	..	1	41	1	..	..
..	5·8	..	5·8	..	..	76	304	76	..	..
3·70	..	3·70	3·70	..	62	..	62	..	..	..
3·40	..	3·40	3·40	..	40	..	40	..	..	..
3·16	..	3·16	3·16	..	33	..	33	..	..	..
5·00	..	5·00	5·00	..	57	..	57	..	..	..
6·37	..	6·37	6·37	..	90	..	90	..	..	..
6·637	321·8	76·63	397·93	..	2,119	611	8,233	1,408	478	3,449

Progress in afforestation and regeneration under working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was in progress at commencement of year (1st April 1931).
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE —*cont.*		YRS.	ACS.		ACS.
Palghat	Walayar forests pole working circle, Block I, compartment 3.	1926-27	181	Stump planting one year old teak stumps.	..
	Pole working circle, Block II, compartment 8, coupe I.	1927-28	112		..
	Pole working circle, Block II, compartment 8, coupe II.	1928-29	125		..
	Pole working circle, Block II, compartment 8, coupe III	1929-30	79		..
	Pole working circle, Block II. compartment 8, coupe IV.	1930-31	91		..
	Pole working circle, Block II, compartment 8, coupe V.	1931-32	108		..
	Pole working circle, Block II, compartment 8, coupe VI.	1932-33	..		..
	Pole working circle, Block II, compartment 8, coupe VII.	1933-34	..		..
	Bolampatty forests ponam working circle, compartment 17, coupe I.	1926-27	45	Ponam ..	..
	Bolampatty forests ponam working circle, compartment 16, coupe II.	1927-28	44	Do. ..	..
	Bolampatty forests ponam working circle, compartment 16, coupe III.	1928-29	25	Do. ..	..

Plans or Schemes during the year 1931-32—*cont.*

Area on which regeneration commenced during the year (1st April 1931 to 31st March 1932).	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1932).	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year (1st April 1931 to 31st March 1932).	Total to 31st March 1932.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.		
..	181	..	181	..	..	44	2,245	1,236	..	..
..	112	..	112	..	..	27	1,733	520	..	..
..	125	..	125	..	..	..	1,064	307	..	..
..	79	..	79	..	..	74	1,011	323	..	..
..	91	..	91	..	..	269	1,092	269	..	..
108	..	108	108	..	924	..	(g) 1,844	..	..	..
..	..	..	..	..	765	..	765	..	..	..
..	..	..	..	..	51	..	51	..	..	..
..	45	..	45	..	..	90	30	208	..	..
..	44	..	44	..	..	..	3	554	..	..
..	25	..	25	..	..	5	112	472	..	..

(g) Correct figure furnished by the District Forest Officers after apportioning nursery charges.

Progress in afforestation and regeneration under Working

Division	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was in progress at commencement of year (1st April 1931).
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE —*cont.*		YRS.	ACS.		ACS.
Palghat—*cont.* ..	Ponam working circle, compartment 16, coupe IV.	1929-30	28	Ponam ..	..
..	Ponam working circle, compartment 16, coupe V.	1930-31	26	Do. ..	..
	Ponam working circle, compartment 16, coupe VI.	1931-32	23	Do. ..	..
		1932-33	..	..	..
	Mullangadu, compartment 27.	1927-28	120	Clearing the area.	..
	Singapathi, coupe II.	1928-29	33	Do.	..
	Mullangadu, coupe II	Do.	31	Do.	..
	Kallar, coupe I ..	1928-29	18	Do.	..
	Kallar, coupe II ...	1928-29 & 1929-30	31	Do.	..
	Kallar strip II Singapathi coupe III.	1929-30	13	Do.	..
	Kallar, coupe III..	1930-31	28	Do.	..
	Singapathi, coupe IV.	Do.	33	Do.	..
	Mullangadu, coupe IV.	Do.	33	Do.	..
	Singapathi, coupe V.	1930-31 & 1931-32	35	Do.	..
	Mullangadu, coupe V.	1930-31 & 1931-32	31	Do.	..
	Kallar, coupe IV..	1930-31 & 1931-32	33	Do.	..
	Sholakarai, coupe IV.	1930-31	58	Tending ..	..
	First half of Singapathi, coupe VI.	1931-32	12	Clearing the area.	..
	First half of Mullangadu, coupe VI.	Do.	13	Do.	..
	First half of Kallar, coupe V.	Do.	17	Do.	..
	Mangarai, coupe I.	Do.	108	Do.	..
	Anaikatty, coupe I.	Do.	88	Do.	..

Plans or Schemes during the year 1931–32—*cont.*

Area on which regeneration commenced during the year (1st April 1931 to 31st March 1932).	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1932).	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year (1st April 1931 to 31st March 1932).	Total to 31st March 1932.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
..	28	..	28	..	..	76	169	320	..	..
..	28	..	28	..	..	400	172	400	..	..
23	..	23	23	..	25	..	69	..	..	..
..	..	..	..	..	91	..	91	..	..	..
..	120	..	120	..	..	..	..	180	..	..
..	33	..	33	..	..	..	..	99	..	..
..	31	..	31	..	..	..	..	34	..	..
..	18	..	18	..	..	..	..	50	..	..
..	31	..	31	..	..	..	..	141	..	..
..	13	..	13	..	..	..	..	36	..	..
..	28	..	28	..	..	..	..	56	..	..
..	33	..	33	..	..	..	..	66	..	..
..	33	..	33	..	..	..	..	50	..	..
19	16	19	35	..	..	34	..	50	..	..
15	16	15	31	..	..	26	..	42	..	..
14	19	14	33	..	..	21	..	59	..	..
..	58	..	58	..	..	..	..	14	..	..
12	..	12	12	..	..	12	..	12	..	..
13	..	13	13	..	..	13	..	13	..	..
17	..	17	17	..	..	9	..	9	..	..
108	..	108	108	..	..	39	..	39	..	..
83	..	83	83	..	..	41	..	41	..	..

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was in progress at commencement of year (1st April 1931).
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE —*cont.*		YRS.	ACS.		ACS.
Palghat—*cont.*	Iebikuli Coupe I.	1931-32	41	Clearing the area.	..
	Propagation of sandal in Thadagam Reserved Forest.	..	..	Do.	..
	Sowing of tama rind in Thadagam Reserved Forest.	..	..	Do.	..
	Total ..		1,660	..	..
	Grand Total ..		20,648·9	..	1,246
	Grand Total, Presidency.		27,295	..	2,805

Plans or Schemes during the year 1931-32—*cont.*

Area on which regeneration commenced during the year 1st April 1931 to 31st March 1932.	Area on which regeneration is complete.			Area on which regeneration is still in progress at close of year (31st March 1932).	Expenditure during the year.		Expenditure from commencement of period.		Revenue during the year.	Total revenue from date of creation.
	Previous.	During year (1st April 1931 to 31st March 1932).	Total to 31st March 1932.		Creation.	Upkeep.	Creation.	Upkeep.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
41	..	41	41	..	..	21	..	21	..	..
..	..	..	..	..	..	27	..	27	..	..
..	..	..	..	..	..	3	..	3	..	..
453	1,207	453	1,660	..	1,866	1,231	10·451	5,651	..	..
1,044	4,830·3	1,904·63	6,734·93	384	26,562	9,139	1,66,859	86,422	5,941	37,642
1,797	8,898	2,516	11,414	2,086	36,677	20,776	2,84,420	3,02,013	9,991	1,76,412

ANNUAL FORM

Forest Department,

Plantations not under Working Plans

Area in acres.

Division and forest.	Method of formation and year of commencement.	At commencement of year, 1st April 1931.	Added during year, 1st April 1931 to 31st March 1932.	Excluded during year 1st April 1931 to 31st March 1932.	On 31st March 1932.
(1)	(2)	(3)	(4)	(5)	(6)
FIRST CIRCLE.		ACS.	ACS.	ACS.	ACS
Regular Plantations.					
Guntur	Muthayapalem, 1924-25 ..	5	..	..	5
Taungya Operations.					
Godavari, Upper ..	Taungya operations ..	311	..	..	311
Cultural Operations.					
Vizagapatam	Tangedu experimental plot in Arlova reserved forest, 1928-29.	12	5	..	17
	Sal experimental plots in Makkava and Polla, 1928-29.	1·5	2	..	3·5
	Sowing of Sandal in Palakonda range.	..	5·65	..	5·65
	Sowing of Teak in Chinnaghora reserved forest.	2·25	4	..	6·25
Godavari, Upper ..	Clear-felling to establish a better quality of trees and tending, etc.	2,197	24·20	..	2,221
	(*a*) Dibbling Sandal ..	26	..	..	25·95
Godavari, Lower ..	Artificial regeneration with teak.	49	40	..	89
Guntur	Muthayapalem, 1912-13 ..	5	..	..	5
	Guthikonda, 1924-25 ..	6	..	..	6
	Venkatayapalem, 1926-27.	3	..	..	3
	Naohugunta	0·2	..	..	0·2
Nellore	Sreeharikota, 1927-28 ..	1·5	2·4	..	3·9
	Kambakam Sandal, 1927-28.	12·5	5	..	17·5
	Udayagiri Durgam Sandal.	0·25	0·25	..	0·5
	Total ..	2,632·61	88·5	..	2,721·11

(*a*) This item was wrongly omitted in previous year's returns.

NOTE.—(1) One acre in Kondapalli shown in the previous year's return has been omitted from this return as the area comes under Working Plan.

(2) 48 acres in Mutkur shown in the previous year's return has been omitted from this return as it is only a patch sowing.

No. 34-B.

Madras.

during the year 1931-32.

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation. (7)	Upkeep. (8)	Creation. (9)	Upkeep. (10)	Total. (11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.	Rs.	Acs.	Rs.	Rs.	Rs.	Rs.
..	..	202	..	202	..	..	202	..	9
217	813	2,435	2,903	5,338	..	454	4,884	1,209	29,444
50	12	138	23	161	..	..	161	..	..
7	..	10	..	10	..	..	10	..	..
28	..	28	..	28	..	..	28	..	..
15	1	34	1	35	..	..	35	..	..
297	925	50,045	3,793	53,838	..	..	53,838	26,714	3,09,823
..	..	16	124	140	..	..	140	..	..
802	6.	1,845.	577	2,422	..	..	2,422	..	..
..	..	22	..	22	..	..	22	..	..
..	..	..	..	..			..	..	..
..	..	38	..	38	..	..	38	..	..
	..	11	..	11	..	..	11	..	..
15	..	75	..	75	5	..	25	..	..
8	..	121	..	121	..	..	121	..	..
5	..	25	..	25	6·72	..	9	..	..
1,444	1,757	55,045	7,421	62,466	11·72	454	61,946	27,923	3,39,276

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres. At commencement of year, 1st April 1931.	Added during year, 1st April 1931 to 31st March 1932.	Excluded during year, 1st April 1931 to 31st March 1932.	On 31st March 1932.
(1)	(2)	(3)	(4)	(5)	(6)
SECOND CIRCLE—*Nil.*					
FOURTH CIRCLE.		ACS.	ACS.		ACS.
Vellore.					
Ambur tope	Planting in 1913	6·00	..	..	6·00
Amerdi plantation ..	Clear-felling and artificially stocking with timber species in 1922–23.	92·25	..	..	92·25
Total ..	..	98·25	..	..	98·25
Central Salem.					
Kurumbapatti plantation.	Sowing teak, 1920–21 ..	1·75	..	..	1·75
Ayyanthirumaligai ..	Sowing several species, 1923–24.	..	..	..	..
Chitteries	Lac cultivation in 1929–30.	..	..	..	..
Shevaroys Central working circle	321 acres to be regenerated in 4 years planting silver oak and cyprus and sowing of seeds of Australian wattle.	143	..	..	143
Sanniyasimalai working circle. ..	4 acres in 1 year planting Acacia decurrens and blue gum.	4	..	..	4
Total ..	..	148·75	..	..	148·75
South Salem.					
Tope attached to the District Forest Officer's quarters. ..	Raising mango trees, 1904.	9·5	..	..	9·5
	Grand total ..	256·50	..	..	256·50

during the year 1931-32—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation.	Upkeep.	Creation.	Upkeep.	Total.					
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	Rs.	Rs.	Rs.	Rs.			Rs.		Rs.
..	15	..	45	45	..	..	45	..	1,736
..	5	3,102	2,225	5,327	..	..	5,327	..	10,846
..	20	3,102	2,270	5,372	..	..	5,372	..	12,582
..	6	202	40	242	..	..	242	..	..
..	..	131	69	200	..	..	200	..	..
..	..	200	..	200	..	..	200	..	..
..	..	..	9,096	9,096	..	..	9,096	..	.. *
..	..	108	..	108	..	..	108	..	.. *
..	6	641	9,205	9,846	..	..	9,846	..	..
..	..	467	1,760	2,227	..	..	2,227	..	280
..	26	4,210	13,235	17,445	..	..	17,445	..	12,862

* These two items were shown in Form 31A last year, but shown here this year as these are not covered by the new consolidated working plan for the division.

Plantations not under Working Plans

Area in acres.

Division and forest.	Method of formation and year of commencement.	At commencement of year, 1st April 1931.	Added during year, 1st April 1931 to 31st March 1932.	Excluded during year, 1st April 1931 to 31st March 1932.	On 31st March 1932.
(1)	(2)	(3)	(4)	(5)	(6)
FIFTH CIRCLE.		ACS.	ACS.		ACS.
Madura.					
Gundan shola blue gum plantation.	....	245	..	..	245
Pambar pine plantation.	1906	842	..	..	842
Gundar valley	Planting *acacia decurrens.*	148	..	..	148
Valaneombai teak plantation.	....	(*a*) 15	..	..	15
Vannathiparai teak plantation.	1870	4	..	..	4
Sethuvaikal new teak plantation.	1920-21	53	..	..	53
Alagar Hills Planting Mahagony.	....	3	..	..	3
Tinnevelly.					
Kudiramoli teri Reserved Forest.	Dibbling palmyra nuts and seeds. *Dodonea Viscosa*	5,644	500	..	6,144
Kariar teak plantation ..	1922-24	85	..	..	85
Kodamady teak plantation.	1917	111	..	..	111
Richmond plantation ..	1906	1	..	..	1
Kariar Kani area ..	1912	23	..	..	23
Haynes plantation ..	....	23	..	..	23
Mundanthurai	Dibbling teak	10	..	..	10
North Coimbatore.					
Minchiguly plantation ..	Dibbling teak, vengai and rosewood seeds and watering and weeding, 1918.	5	..	..	5
	Total ..	7,212	500	..	7,712

NOTE.—In Madura a sum of Rs. 410 spent on regeneration of valuable species in the Surlipatti plateau is excluded, Rs. 57 were spent in restocking of degraded fuel coupes with indigenous species.

(*a*) The actual extent is only 15 acres.

(*b*) Represents expenditure on establishment of acacia fire-belt charged under fire protections.

(*c*) Excludes Rs. 53 spent for stock-mapping of timber areas in the evergreen forests by the Assistant Working Plans Officer.

NOTE.—In Tinnevelly Rs. 168 were spent in planting teak in fuel coupes, Rs. 20 in dibbling sandal seeds in Valliyur Reserved Forest and Rs. 60 in maintenance of timber regeneration areas in Kannikatty evergreen forests.

during the year 1931-32—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation. (7) Rs.	Upkeep. (8) Rs.	Creation. (9) Rs.	Upkeep. (10) Rs.	Total. (11) Rs.	(12)	(13)	(14) Rs.	(15) Rs.	(16) Rs.
..	..	18,985	..	18,985	..	..	18,985	28	5,655
..	(b) 547	33,486	5,999	39,485	..	..	39,485	75	1,152
..	..	3,106	131	3,237	..	..	3,237	..	..
..	..	1,124	142	1,266	..	..	1,266	..	2,315
..	..	1,405	..	1,405	..	..	1,405	..	2,125
..	..	3,770	759	4,529	..	..	4,529	..	..
..	..	64	..	64	..	..	64	..	..
(c) 953	.. ..	12,800	1,899	14,699	..	..	14,699	1,523	55,525
..	.. ..	1,642	757	2,399	..	..	2,399	..	107
..	..	4,236	1,237	5,473	..	..	5,473	..	218
..	..	5	..	5	..	..	5	..	94
..	..	47	310	357	..	..	357	..	178
..	..	26	37	63	..	..	63	..	..
..	..	182	35	217	..	..	217	..	..
..	..	123	618	741	..	..	741	..	..
953	547	81,001	11,924	92,925	..	..	92,925	1,626	67,369

Plantations not under Working Plans

Area in acres.

Division and forest.	Method of formation and year of commencement.	At commencement of year, 1st April 1931.	Added during year, 1st April 1931 to 31st March 1932.	Excluded during year, 1st April 1931 to 31st March 1932.	On 31st March 1932.
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE.		ACS.	ACS.		ACS.
Mangalore North.					
Udipi Range.					
Someshwar	Sowing of Hopea, Dhupa and wild Jack in prepared patches, 1920-21 and 1927-28.	659	..	..	659
	Sowing of teak, xylia, rosewood, etc., in gaps formed by timber felling in coupe IV, in 1929-30.	2	..	..	2
	Sowing of teak, xylia, rosewood, etc., in gaps formed by timber felling in coupe V, in 1929-30 and 1930-31.	4	..	..	4
	Sowing of Hopea in timber, coupe III felled area in 1930-31.	65	..	..	65
	Sowing of Hopea in timber coupe III felled area in 1931-32.	91	..	..	91
	Sowing of teak, etc., in gaps formed by timber fellings in coupe VI (*a*) in 1931-32.	4	..	..	4
	Sowing of teak, etc., in gaps formed by timber fellings in coupe VI (*b*) in 1931-32	..	2	..	2
Jatkatimale	Sowing of Hopea and Dhupa in prepared patches.	1,139	..	..	1,139
Halesomeshwar	Sowing of Hopea in prepared patches, 1922-23, 1924-25 and 1926-27.	1,744	..	..	1,744
Coondapoor Range.					
Madibare	Sowing of xylia in prepared patches, 1927-28.	11	..	..	11
Mangalore Range.					
Kodiamale	Sowing of Hopea in prepared patches, 1921-22.	52	..	..	52
	Total ..	3,771	2	..	3,773
Mangalore South.					
Kasaragod Range.					
Parappa Reserved Forest, compartment VI (portion).	Sowing of deciduous species after clearfelling and burning, 1924.	16	..	..	16
Parappa Reserved Forest, compartment VII (portion).	Sowing of deciduous species after clearfelling and burning, 1926-27.	23	..	..	23

during the year 1931-32—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation.	Upkeep.	Creation.	Upkeep.	Total.					
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.	Rs.	Acs.		Rs.		
..	..	2,593	1,929	4,522	19	..	4,414	..	..
..	21	155	47	202	..	..	202	..	..
23	4	182	4	186	..	..	186	..	..
..	123	416	123	539	..	..	539	..	..
385	..	585	..	585	..	..	585	..	..
12	..	63	..	63	..	..	63	..	..
42	..	42	..	42	..	..	42	..	..
..	..	3,122	5,686	8,808	152	..	8,039	..	..
..	287	7,254	5,342	12,596	99	..	12,321	..	..
..	..	121	25	146	..	..	146	..	..
..	..	145	14	159	..	..	159	..	..
462	436	14,678	13,170	27,848	270	..	26,696	..	..
..	..	99	123	222	..	..	222	..	..
..	10	407	275	682	..	..	682	..	..

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres			
		At commencement of year, 1st April 1931.	Added during year, 1st April 1931 to 31st March 1932.	Excluded during year, 1st April 1931 to 31st March 1932.	On 31st March 1932.
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE—*cont*					
Mangalore South—cont.		ACS.	ACS.		ACS.
Kasaragod Range—*cont.*					
Parappa Reserved Forest, compartments I to X.	Sowing and planting of evergreen species.	1,967	..	...	1,967
Parappa, Reserved Forest, compartment IX (portion).	Sowing with *Artocarpus hirsuta* and *Malia Dubia* (area felled in 1926-27) in 1929.	16	..	..	16
Jalour East Reserved Forest, coupes I and II.	Sowing and planting of Hopea under existing growth, 1926-27.	252	..	..	252
Do.	Natural regeneration of evergreen species, 1926-27.	147	..	..	147
Parappa Reserved Forest, compartment V (portion).	Sowing and planting of teak, 1930.	30	..	..	30
Aletti West Reserved Forest, strip II.	Artificial regeneration over 35 acres with Hopea, etc., and natural regeneration over 20 acres—(area felled in 1928-29) 1929-30 plantation.	55	..	..	55
Aletti West Reserved Forest, strips I, III to V.	Natural regeneration, i.e., tending natural Hopea seedlings over an area of 56 acres and artificial regeneration with Hopea and *Artocarpus hirsuta* over the remaining area of 121 acres (area felled in 1929-30) 1930-31 plantation.	177	..	..	177
Mandekole Reserved Forest, coupe I.	Artificial regeneration with Hopea and tinee (area felled in 1930-31) 1931-32 plantation.	...	51	..	51
Aletti East Reserved Forest, compartment III of Aletti series.	Artificial regeneration over 23 acres with Hopea and tinee and natural regeneration, i.e., tending natural Hopea seedlings over an area of 12 acres (1931-32 plantation).	..	35	..	35
Uppinangadi Range.					
Porkala and Padnur Reserved Forest.	Sowing and planting of evergreen species, mainly Hopea, 1920-24.	1,405	..	..	1,405
Nerankimale Reserved Forest.	Clearfelling, burning and sowing deciduous species.	89	..	..	89

during the year 1931-32—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation.	Upkeep.	Creation.	Upkeep.	Total.					
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.	Rs.	Acs.	Rs.	Rs.		
..	86	5,456	5,947	11,403	275	1,021	10,382	..	..
..	60	617	195	812	5	197	615	..	..
..	..	1,541	2,695	4,236	..	..	4,236	..	..
..	37	289	4,778	5,067	..	..	5,067	..	..
..	485	900	485	1,385	..	..	1,385	..	..
..	..	206	65	271	..	..	271	..	..
..	..	706	..	706	..	..	706	..	..
182	..	182	..	182	..	..	182	..	..
248	..	248	..	248	..	..	248	..	..
..	..	6,520	6,984	13,504	214	217	13,287	..	..
..	..	357	559	916	..	..	916	..	..

Plantations not under Working Plans

Division and forest.	Method of formation and year of commencement.	Area in acres. At commencement of year, 1st April 1931.	Added during year, 1st April 1931 to 31st March 1932.	Excluded during year, 1st April 1931 to 31st March 1932.	On 31st March 1932.
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE.—*cont.*					
Mangalore South—cont.		ACS.	ACS.		ACS.
Uppinangadi Range—*cont.*					
Kidu Reserved Forest ..	Natural regeneration of evergreen forests started in 1922.	19	..	..	19
Nerankimale Reserved Forest, coupe XIII.	Artificial regeneration with Hopea and teak (1930-31 plantation).	..	6	..	6
Mujur Reserved Forest, coupe I.	Planting hopea seedlings over 23 acres, planting Hopea in patches in gaps formed by felling over 131 acres and planting teak and vengai over 1 acre (1930-31 plantation).	155	..	..	155
Do. coupe II.	Artificial regeneration of Hopea and Artocarpus *hirsuta* (1931-32 plantation).	..	83	..	83
Puttur Range.					
Nalkur Reserved Forest, coupes I and II.	Natural regeneration of evergreen forests started in 1922.	1,154	..	..	1,154
Sampaji Reserved Forest, coupe II.	Clear-felling, and sowing with teak (area felled in 1929-30), 1930 plantation.	26	..	..	26
Do.	Experimental area of 1929-30, clear-felling, burning and sowing with teak.	4	..	..	4
Sampaji Reserved Forest, coupe III.	Clear felling, burning and sowing teak (1931-32 plantation).	12	..	..	12
Beltangadi Range.					
Mundaje Kap Reserved Forest.	Sowing and planting of evergreen species (Hopea), 1926.	277	..	..	277
Do.	Sowing and planting of evergreen species (Hopea), 1927.	132	..	.. ..	132 ..
	Total ..	5,956	175	..	.. 6,131

during the year 1931-32—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during year.	Total revenue from date of creation.
Creation.	Upkeep.	Creation.	Upkeep.	Total.					
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.	Rs.	A s.	Rs.	Rs.		
..	..	..	170	170	..	..	170	..	..
82	20	82	20	102	..	..	102	..	..
..	50	275	50	325	..	..	325	..	..
132	..	132	..	132	..	..	132	..	..
..	..	..	8,730	8,730	..	..	8,730	..	..
..	205	948	205	1,153	..	..	1,153	..	..
..	7	171	7	178	..	..	178	..	..
234	..	427	..	427	..	..	427	..	..
..	4	1,725	740	2,465	..	..	2,465	..	..
..	3	624	297	921	..	..	921	..	..
878	967	21,912	32,325	54,237	494	1,436	52,802	..	..

Plantations not under Working Plans

Area in acres.

Division and forest.	Method of formation and year of commencement.	At commencement of year, 1st April 1931.	Added during year, 1st April 1931 to 31st March 1932.	Excluded during year 1st April 1931 to 31st March 1932.	On 31st March 1932.
(1)	(2)	(3)	(4)	(5)	(6)
SIXTH CIRCLE—*cont.*		ACS.	ACS.	ACS.	ACS.
Wynaad.					
Kannoth Range	Regular plantations ..	273	..	..	273
	Taungya do. ..	354	..	..	354
	Cultural operations ..	1,816	(*b*) 640	..	2,456
	Total ..	2,443	640	..	3,083
Nilambur—Nil.					
The Nilgiris—Nil.					
Palghat.					
Puliyampatti tope reserve.	Taungya plantations, 1929-30.	20	..	..	20
Vallapathi	Cultural operations, 1929-30.	39	..	..	39
Muthikulam bungalow compound.	Cultural operations, 1921-22.	4	..	..	4
Palghat Range office compound.	Cultural operations, 1919-20.	1	..	1	..
Dhone Reserve	Do.	10	..	..	10
Elival teak plantation (old).	Do.	10	..	..	10
Chenat Nair old plantation.	Cultural operations, 1920-21.	264	..	..	264
Dhone 4-acre plot (teak) ..	Cultural operations, 1928-29.	4	..	..	4
Dhone 26-acre plot (teak).	Cultural operations, 1929-30.	26	..	..	26
Dhone coupe II (teak) ..	Cultural operations, 1330-31.	23	..	..	23
Dhone coupe III (teak) ..	Cultural, operations, 1931-32.	..	20	..	20
	Cultural operations, 1932-33.	..	..	..	..
	Cultural operations, 1933-34.	..	..	..	..
Elival teak plantation ..	Cultural operations, 1928-29,	21	..	..	21
	Cultural operations, 1929-30	33	..	..	33
	Cultural operations, 1930-31.	35	..	..	35
	Cultural operations, 1931-32.	..	55	..	55
	Cultural operations, 1932-33.	..	..	..	..
	Cultural operations, 1933-34.	..	..	..	..
	Total ..	490	75	1	.. 564

during the year 1931–32—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed areas.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation.	Upkeep.	Creation.	Upkeep.	Total.					
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.	Rs.	Acs.	Rs.	Rs.		Rs.
..	50	1,284	6,321	7,605	..	..	7,605	..	2,344
4	10	906	4,445	5,351	..	..	5,351	..	3,488
			(a) — 1	(a) — 1			(a) — 1		
96	37	296	47	343	..	..	343	..	..
			(a) + 1	(a) + 1			(a) + 1		
100	97	2,486	10,813	13,299	..	..	13,299	..	5,832
..	..	..	329	329	..	..	329	..	..
..	..	573	59	632	..	..	632	..	..
..	..	110	..	110	..	..	110	..	..
..	..	50	53	103	1	103	..	..	..
..	..	221	129	350	..	..	350	..	..
..	..	..	144	144	..	..	144	..	..
..	195	2,866	5,268	8,134	..	..	8,134	..	..
..	2	50	18	68	..	..	68	..	..
..	26	625	245	870	..	..	870	..	..
..	84	(c) 944	84	1,028	..	..	1,028	..	..
322	..	662	..	662	..	..	662	..	..
213	..	273	..	273	..	..	273	..	..
50	..	50	..	50	..	..	50	..	..
..	21	343	128	471	..	..	471	..	..
..	32	677	144	821	..	..	821	..	..
..	124	840	124	964	..	..	964	..	..
950	..	1,337	..	1,337	..	..	1,337	..	..
85	..	155	..	155	..	..	155	..	..
58	..	58	..	58	..	..	58	..	..
1,678	484	9,834	6,725	16,559	1	103	16,456	..	..

(a) Erroneous adjustment in previous years non-rectified.

(b) Represents sleeper worked areas in Peria Reserve during 1930-31, in which 252 gaps of different sizes were regenerated. It does not represent the actual area regenerated.

(c) Correct figures now adopted.

Plantations not under Working Plans

Area in acres.

Division and forest.	Method of formation and year of commencement.	At commencement of year, 1st April 1931.	Added during year, 1st April 1931 to 31st March 1932.	Excluded during year, 1st April 1931 to 31st March 1932.	On 31st March 1932.
(1)	(2)	(3)	(4)	(5)	(6)
		ACS.	ACS.	ACS.	ACS.
SIXTH CIRCLE—*cont.*					
Palghat—cont.					
Sappal teak plantation ..	Cultural operations—				
	1928-29	5	..	..	5
	1929-30	13	..	..	13
	1930-31	..	..	..	..
Regeneration in Kalladikode Valley Coupe I.	1931-32	..	..	..	..
Regeneration in Silent Valley Coupe I	1929-30	..	..	..	..
Regeneration in Silent Valley Coupe II	1930-31	..	..	..	..
Regeneration in Silent Valley Coupe III.	1931-32	..	..	..	..
	1933-34	..	..	..	..
Experimental nursery of satin wood.	1928-29	..	..	..	..
Evergreen nursery at Dhoni.	1928-29	..	..	..	..
Nursery for coffee robusta.	1928-29	..	..	..	..
Nursery for Andaman Padauk.	1928-29	..	..	..	..
Nursery for Burma Padauk.	1928-29	..	..	..	..
Evergreen nursery in Silent Valley.	....	..	..	..	..
Supply of seeds	.. ....	..	..	..	..
	.. Total ..	508	75	1	582
	.. Grand Total ..	12,678	892	1	13,569
	Parlakimedi maliahs ..	235	18	..	253
	Grand Total, Presidency ..	23,015	1,499	1	24,513

during the year 1931-32—*cont.*

Expenditure during the year.		Total expenditure from commencement including expenditure on all failed area.			Total area written off from start.	Expenditure in failed areas during the year.	Expenditure from commencement excluding failed areas.	Revenue during the year.	Total revenue from date of creation.
Creation.	Upkeep.	Creation.	Upkeep.	Total.					
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.	Rs.	Acs.	Rs.	Rs.		Rs.
..	5	103	14	117	..	..	117	..	..
..	13	386	58	444	..	..	444	..	..
160	..	863	..	863	..	..	863	..	..
..	..	160	..	160	..	..	160	..	..
..	8	674	48	697	..	..	697	..	..
..	45	(a) — 25							
		244	45	314	..	..	314	..	..
385	..	(a) + 25							
		385	..	385	..	..	385	..	..
15	..	15	..	15	..	..	15	..	..
..	..	13	13	26	..	26	..	..	..
..	..	30	..	30	..	..	30	..	..
..	..	12	..	12	..	12	..	..	..
..	..	18	..	18	..	..	18	..	..
..	..	7	..	7	..	7	..	..	..
..	..	(c) 82	..	82	..	..	82	..	..
..	..	..	..	..	..	..	..	..	..
2,238	555	12,826	6,903	19,729	1	148	19,581	..	..
3,678	2,054	51,902	62,211	1,15,113	765	1,588	1,12,378	..	5,832
87	106	734	1,732	2,465	..	..	3,465	..	..
6,162	4,490	1,92,892	96,523	2,90,414	777	2,037	2,87,159	29,549	4,25,339

(a) Erroneous adjustment in previous years now rectified.

(b) Represents sleeper worked areas in Peria Reserve during 1930-31 in which 252 gaps of different sizes were regenerated. It does not represent the actual area regenerated.

(c) Correct figures now adopted.

Annual Form No. 35.

Forest Department, Madras Presidency.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1931–32 and Agency of Exploitation.

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
First Circle.															
I. Reserved Forests.															
Ganjam	..	73	17	39	129	..	111	..	..	111	..	..	..	..	..
Vizagapatam	6	..	..	..	6	..	18	1	..	19	..	..	..	..	..
Godavari, Upper ..	4	..	..	..	4	3	..	..	..	3	..	..	..	..	..
Do. Lower ..	7	151	..	..	158	..	1	..	..	1	..	..	..	..	..
Guntur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	17	224	17	39	297	3	130	1	..	134	..	..	..	..	..
II. Leased Forests—Nil.															
III. Reserved Lands —Nil.															
IV. Unreserved Lands.															
Ganjam	..	40	1	..	41	..	38	..	..	38	..	..	..	..	..
Vizagapatam	..	..	..	..	..	..	23	3	..	26	..	..	..	..	..
Godavari, Upper ..	2	1	..	..	3	3	6	..	..	9	..	..	..	..	..
Do. Lower ..	..	34	28	..	62	..	..	..	..	..	..	..	..	..	..
Guntur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	2	75	29	..	106	3	67	3	..	73	..	..	..	..	..
Grand Total ..	19	299	46	39	403	6	197	4	..	207	..	..	..	..	..

Outturn (*in thousands of cubic feet, solid*) of Timber and Fuel during the year 1931-32 and Agency of Exploitation—*cont.*

Division.	Miscellaneous.					Total timber.					Fuel.					Total outturn.
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
FIRST CIRCLE—*cont.*																
I. Reserved Forests—cont.																
Ganjam	..	..	..	..	..	..	184	17	39	240	20	529	..	..	549	789
Vizagapatam	1	..	..	..	1	7	18	1	..	26	2	287	..	..	289	315
Godavari, Upper	..	..	..	..	..	7	..	..	..	7	..	..	..	..	..	7
Do. Lower	..	..	..	..	..	7	152	..	..	159	22	432	115	..	569	728
Guntur	..	6	..	..	6	..	6	..	..	6	36	978	..	..	1,014	1,020
Nellore	..	..	..	..	..	..	..	..	..	..	7	687	..	..	694	694
Total	1	6	..	..	7	21	360	18	39	438	87	2,913	115	..	3,115	3,553
II. Leased Forests—Nil.																
III Reserved Lands—Nil.																
IV. Unreserved Lands—cont.																
Ganjam	..	..	..	..	..	..	78	1	..	79	..	76	..	..	76	155
Vizagapatam	..	..	..	..	..	..	23	3	..	26	..	30	..	..	30	56
Godavari, Upper	..	..	..	..	..	5	7	..	..	12	2	24	..	..	26	38
Do. Lower	..	..	..	..	..	..	34	28	..	62	..	7	..	..	7	69
Guntur	..	13	13	..	26	..	13	13	..	26	..	88	..	..	88	114
Nellore	..	8	8	..	16	..	8	8	..	16	..	68	..	..	68	84
Total	..	21	21	..	42	5	163	53	..	221	2	293	..	..	295	516
Grand Total	1	27	21	..	49	26	523	71	39	659	89	3,206	115	..	3,410	4,069

NOTE.—The figures against all divisions under reserved forests and for Upper Godavari under unreserved lands are actuals.

GANJAM :—The figures under "Purchasers" are estimates obtained by converting revenue at seigniorage rates. The other figures are actuals.

VIZAGAPATAM :—The figures under "Purchasers" are estimates furnished by Tahsildars. Others are actuals.

LOWER GODAVARI :—The figures under "Purchasers" are estimates obtained by converting revenue at As. 1-6 per cubic foot. The other figures are actuals.

GUNTUR :—Except under "Free grantees" the figures are estimates obtained by converting revenue at 1 anna per cubic foot.

NELLORE :—Except under "Free grantees" the figures are estimates obtained by converting revenue at 3 pies per cubic foot.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1931-32 and Agency of Exploitation—*cont.*

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
SECOND CIRCLE.															
I. Reserved Forests.															
Anantapur	..	12	1	..	13	..	..	..	..	..	..	..	..	..	..
Kurnool, East ..	3	1	..	..	4	1	..	..	..	1	..	..	..	..	..
Do. South ..	38	99	..	..	137	2	92	3	1	98	..	..	..	..	..
Do. West ..	1	3	2	..	6	2	10	..	..	12	2	34	..	..	36
Cuddapah, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	42	115	3	..	160	5	102	3	1	111	(*a*) 2	(*a*) 34	..	..	36
II. Leased Forests—Nil.															
III. Reserved Lands—Nil.															
IV. Unreserved Lands.															
Anantapur	..	87	6	..	93	..	..	..	..	..	..	..	..	..	..
Kurnool, East ..	..	3	12	..	15	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	4	..	..	4	..	..	..	..	..
Do. West ..	..	21	..	..	21	..	..	..	..	..	..	..	..	..	..
Cuddapah, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	111	18	..	129	..	4	..	..	4	..	..	..	..	..
Grand Total ..	42	226	21	..	289	5	106	3	1	115	(*a*) 2	(*a*) 34	..	..	36

(*a*) Square timber.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1931-32 and Agency of Exploitation—cont.

Division.	Miscellaneous.					Total timber.					Fuel.					Total outturn.
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
SECOND CIRCLE—*cont.*																
I. Reserved Forests —cont.																
Anantapur	..	..	..	..	..	..	12	1	..	13	4	219	..	..	223	236 *
Kurnool, East ..	1	..	..	..	1	5	1	..	..	6	..	25	..	..	25	31 *
Do. South ..	..	2	..	..	2	40	193	3	1	237	2	277	..	1	280	517 *
Do. West ..	..	..	..	..	..	5	47	2	..	54	76	862	..	..	938	992 *
Cuddapah, North ..	1	16	2	..	19	1	16	2	..	19	13	1,971	..	..	1,984	2,003 *
Do. South ..	2	23	2	..	27	2	23	2	..	27	254	4,049	..	..	4,303	4,330 *
Total ..	4	41	4	..	49	53	292	10	1	356	349	7,403	..	1	7,753	8,109
II. Leased Forests—Nil.																
III. Reserved Lands—Nil.																
IV. Unreserved Lands —cont.																
Anantapur	..	..	..	..	..	..	87	6	..	93	..	55	..	..	55	148 †
Kurnool, East ..	..	..	..	..	..	..	3	12	..	15	..	6	..	..	6	21 †
Do. South ..	..	..	..	..	..	..	4	..	..	4	..	10	..	..	10	14 †
Do. West ..	..	..	..	..	..	..	21	..	..	21	..	41	..	..	41	62 †
Cuddapah, North ..	..	4	..	..	4	..	4	..	..	4	..	7	..	..	7	11 †
Do. South ..	..	1	..	..	1	..	1	..	..	1	..	2	..	..	2	3 †
Total ..	..	5	..	..	5	..	120	18	..	138	..	121	..	..	121	259
Grand Total ..	4	46	4	..	54	53	412	28	1	494	349	7,524	..	1	7,874	8,368

† Estimates based on revenue collected by Tahsildars. Timber at Rs. 2-8-0 per cart-load of 20 cubic feet and fuel at Rs. 1-4-0 per cart-load of 20 cubic feet.

* Actuals.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1931–32 and Agency of Exploitation—*cont.*

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
FOURTH CIRCLE.															
I. Reserved Forests.															
Chittoor	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vellore	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..
Salem, North	(c)	(c)	..	..	..	1	(c)	..	..	1	(c)	..	..	..	..
Do. Central	..	3	..	..	3	..	..	..	..	..	..	..	..	..	..
Do. South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	3	..	..	3	2	..	..	..	2	..	..	..	..	..
II. Leased Forests —Nil.															
III. Reserved Lands —Nil.															
IV. Unreserved Lands.															
Chittoor	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Salem, North	..	..	..	..	..	..	23	..	..	23	..	..	..	..	..
Do. Central	..	25	..	..	25	..	..	..	..	..	..	..	..	..	..
Do. South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	25	..	..	25	..	23	..	..	23	..	..	..	..	..
Grand Total	..	28	..	..	28	2	23	..	..	25	..	..	..	..	..

Government Agency.—Based on actuals.
Reserves—Timber and fuel—Purchasers—Chittoor and Central Salem.—Based on actuals.
Vellore and North Salem.—Actuals based on contractor's accounts.
(*c*) Timber less than 500 cubic feet. Hence ignored.

Outturn (*in thousands of cubic feet, solid*) of Timber and Fuel during the year 1931–32 and Agency of Exploitation—*cont.*

Division.	Miscellaneous.					Total timber.					Fuel.					Total outturn.
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
FOURTH CIRCLE—*cont.*																
I. Reserved Forests—cont.																
Chittoor	(*a*) 2	1	..	..	3	2	1	..	..	3	13	703	..	..	716	719
Vellore	(*b*) 3	7	..	..	10	4	7	..	..	11	25	502	..	..	527	538
Salem, North ..	(*b*) 1/2 (*c*) ..		..	..	3	4	..	..	..	4	9	144	..	..	153	157
Do. Central ..	(*b*) 4	..	..	..	4	4	3	..	..	7	25	231	..	..	256	263
Do. South ..	(*a*) ..	1	..	..	1	..	1	..	..	1	18	167	..	..	185	186
Total ..	12	9	..	..	21	14	12	..	..	26	90	1,747	..	..	1,837	1,863
II. Leased Forests—Nil.																
III. Reserved Lands—Nil. ..																
IV. Unreserved Lands—cont.																
Chittoor	..	18	4	..	22	..	18	4	..	22	..	24	..	..	24	46
Vellore	..	84	16	..	100	..	84	16	..	100	..	213	..	..	213	313
Salem, North ..	(*b*) 2	..	5	..	7	2	23	5	..	30	..	10	..	..	10	40
Do. Central ..	..	215	4	..	219	..	240	4	..	244	..	65	..	..	65	309
Do. South ..	..	76	4	..	80	..	76	4	..	80	..	69	..	..	69	149
Total ..	2	393	33	..	428	2	441	33	..	476	..	381	..	..	381	857
Grand Total ..	14	402	33	..	449	16	453	33	..	502	90	2,128	..	..	2,218	2,720

South Salem—Timber.—Calculated on money value at 7½ annas per cubic foot and fuel based on actuals furnished by coupe contractors.

Unreserved Lands—Purchasers—Timber and fuel—Based on money value obtained by sale in all divisions.

Chittoor.—Timber at 3 annas per cubic foot and fuel at 1½ annas per cubic foot.

Note.—(*a*) Represents sandalwood less than 500 cubic feet. Hence ignored.
(*b*) Represents sandalwood
Sandalwood two quarters = One cubic foot.
Charcoal 1 cubic foot = 6 cubic feet of fuel.

Vellore.—Timber at 2 annas per cubic foot and fuel at one anna per cubic foot.

North Salem—Timber at 2 annas per cubic foot and fuel at 1¾ annas a cubic foot.

Central and South Salem.—Timber at 4 annas per cubic foot and dead tree and fuel at one anna per cubic foot.

Free grants—Palmyra trees—
Chittoor.—Twenty cubic feet per tree.
Vellore.—Ten cubic feet per tree.
South and Central Salem.—Seven cubic feet per tree.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1931-32 and Agency of Exploitation—*cont.*

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
FIFTH CIRCLE.															
I. Reserved Forests.															
Kollegal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Coimbatore, North ..	1	..	..	..	1	6	..	..	..	6	..	..	..	..	..
Do. South ..	(*d*) 69	(*e*) 62	..	..	131	..	..	..	..	..	(*f*) 83	..	..	..	83
Madura	(*i*) ..	..	..	..	..	1	..	..	..	1	(*j*) 1	..	..	..	1
Tinnevelly	1	5	..	..	6	..	1	..	..	1	(*k*) 3	(*k*) 9	..	..	12
Total ..	71	67	..	..	138	7	1	..	..	8	87	9	..	..	96
II. Leased Forests.—															
Nil.															
III. Reserved Lands—															
Nil.															
IV. Unreserved Lands.															
Kollegal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Coimbatore, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Madura	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tinnevelly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grand Total ..	71	67	..	..	138	7	1	..	..	8	87	9	..	..	96

		c.ft.
(*d*) Timber relating to Mount Stuart commercial concern	..	37,749
Non-commercial area timber relating to Punachi Range	..	28,544
Do. do. Ulandi Range	..	2,575
Do. do. Pollachi Range	..	82
		68,950
(*e*) Timber cut and removed from Ulandi Range		61,567
Top ends Ulandi Range		470
		62,037
(*f*) *Squared timber*.—Mount Stuart commercial concern		35,092 *
Non-commercial area—Punachi		4,008 *
		39,100

* Represents outturn of timber directly obtained by squaring.

Sawn timber.—Valparai sleeper project 10,248 B. G. sleepers	..	33,804 †
5,124 M.G. sleepers	..	8,326 †
Red cedar scantlings	..	2,138 ‡
		44,268

† Obtained from the gross yield of 85,827 c.ft. of timber.
‡ Represents outturn of timber directly sawn.

(*i*) Three hundred and twenty c.ft. omitted being less than 1,000 c.ft.
(*j*) Represents 512 c.ft. of sawn timber obtained from 636 c.ft. in round.
(*k*) Represents sawn timber.
Government = 2,741 c.ft. } The gross timber from which sawn quan-
Purchasers = 8,990 c.ft. } tity was obtained is 16,414 c.ft.

Factor of conversion.

Sandalwood 2 quarters = 1 c.ft.

Unreserved lands.

North Coimbatore and Kollegal. Miscellaneous timber : 2 annas = 1 c.ft.
Kollegal : Fuel ½ anna = 1 c.ft.
North Coimbatore : fuel 1 anna = 1 c.ft.
South Coimbatore : Miscellaneous timber ¼ annas = 1 c.ft.
Fuel 1 anna = 1 c.ft.
Tinnevelly and Madura : Timber and fuel = 1 anna = 1 c.ft.
Tinnevelly : 1 palmyra tree = 10 c.ft.

The District Forest Officers have certified that the net result of all exploitation agencies have been added to the district figures.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1931-32 and Agency of Exploitation—*cont.*

Division.	Miscellaneous.					Total timber.					Fuel.					Total outturn.
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
FIFTH CIRCLE—*cont.*																
I. Reserved Forests—cont.																
Kollegal	(*a*) 4	5	..	..	9	4	5	..	..	9	..	39	..	..	39	48
Coimbatore, North	(*b*) 10	6	(*c*) ..	..	16	17	6	..	..	23	..	811	..	..	811	834
Do. South	(*g*) 9	3	..	..	12	161	65	..	..	226	2	137	..	..	139	365
Madura	..	10	..	..	10	2	10	..	..	12	5	652	..	..	657	669
Tinnevelly	..	33	..	..	33	4	48	..	..	52	1	1,114	..	..	1,115	1,167
Total ..	23	57	..	..	80	188	134	..	..	322	8	2,753	..	..	2,761	3,083
II. Leased Forests—Nil.																
III. Reserved Lands—Nil.																
IV. Unreserved Lands—cont.																
Kollegal	..	8	..	..	8	..	8	..	..	8	..	5	..	..	5	13
Coimbatore, North	..	37	4	..	41	..	37	4	..	41	..	37	..	..	37	78
Do. South	..	4	1	..	5	..	4	1	..	5	..	43	..	..	43	48
Madura	..	97	3	..	100	..	97	3	..	100	..	109	..	..	109	209
Tinnevelly	..	..	19	..	19	..	..	19	..	19	..	53	..	..	53	72
Total ..	..	146	27	..	173	..	146	27	..	173	..	247	..	..	247	420
Grand Total ..	23	203	27	..	253	188	280	27	..	495	8	3,000	..	..	3,008	3,503

(*a*) Denotes sandalwood.

(*b*) Includes 3,860 c.ft. of sandalwood received from Kollegal and 78 c.ft. from the Nilgiris.

(*c*) Forty-five cubic feet omitted being less than 1,000 c.ft.

(*g*) Mount Stuart commercial concern—

	C.	FT.
254 sets of spokes and felloes	=	2,794
Non-commercial area—Punachi 42 sets of spokes and felloes ..	=	420
Brake poles (No. 2,685)	=	5,370
		8,584

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1931-32 and Agency of Exploitation—cont.

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
SIXTH CIRCLE.															
I. Reserved Forests.															
Mangalore, North ..	13	..	..	..	13	..	..	..	..	..	..	..	..	..	..
Do. South ..	39	..	..	..	39	..	..	..	..	..	..	..	..	..	..
Wynaad	65	..	..	..	65	8	..	..	..	8	(*b*) 75	..	..	..	(*b*) 75
Nilambur	107	2	..	..	109	38	..	..	..	38	..	(*c*) 1	..	..	(*c*) 1
The Nilgiris	(*a*) 4	..	..	..	4	..	..	..	..	..	..	..	..	..	..
Palghat	129	49	..	..	178	1	..	..	..	1	..	..	..	..	..
Total ..	357	51	..	..	408	47	..	..	..	47	75	1	..	..	76
II. Leased Forests.															
Nilambur	143	..	..	..	143	25	..	..	..	25	..	(*c*) 1	..	..	(*c*) 1
III. Reserved Lands—Nil.															
IV. Unreserved Lands.															
Mangalore, North ..	17	..	..	..	17	..	..	..	..	..	..	..	..	..	..
Do. South ..	(*a*) 101	..	..	..	101	..	..	..	..	..	..	..	..	..	..
Wynaad	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nilambur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(*a*) Includes 204 c.ft of sandalwood of North Mangalore division, 743½ c.ft. of sandalwood of the Nilgiris division and 100 c.ft. of sandalwood of South Mangalore division. (Factor of conversion 2 qr. =1 c ft.)
(*b*) Rough squared timber ; the quantity represents the outturn after measurement of the logs after rough squaring.
(*c*) Sleepers, spokes and felloes hewn out of top ends and rejections and they represent the net outturn.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1931-32 and Agency of Exploitation—*cont.*

Division.	Miscellaneous.					Total timber.					Fuel.					
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Total outturn.
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
SIXTH CIRCLE—*cont.*																
I. Reserved Forests—cont.																
Mangalore, North ..	(a) 1	17	..	..	18	(a) 13	17	..	..	30	2	887	..	..	889	919
Do. South ..	..	4	..	..	4	39	4	..	..	43	8	124	..	..	132	175
Wynaad	..	1	..	..	1	148	1	..	..	149	..	..	..	..	..	149
Nilambur	..	..	..	..	..	145	3	..	..	148	..	5	..	..	5	153
The Nilgiris	..	..	..	..	..	(a) 4	..	..	..	4	(d) 472	173	..	..	645	649
Palghat	..	..	..	..	..	130	49	..	..	179	..	422	..	..	422	601
Total ..	1	22	..	..	23	479	74	..	..	553	482	1,611	..	..	2,093	2,646
II. Leased Forests—cont.																
Nilambur	..	..	..	..	..	168	1	..	..	169	..	6	..	..	6	175
III. Reserved Lands—Nil.																
IV. Unreserved Lands—cont.																
Mangalore, North ..	..	11	..	12	23	17	11	..	12	40	..	52	..	11	63	103
Do. South ..	..	19	..	4	23	(a) 101	19	..	4	124	..	61	..	..	61	185
Wynaad	..	4	..	..	4	..	4	..	..	4	..	18	..	..	18	22
Nilambur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(a) Includes 204 c.ft. of sandalwood of North Mangalore division, 7·43½ c.ft. of sandalwood of the Nilgiris division and 100 c.ft. of sandalwood of South Mangalore division. (Factor of conversion 2 qrs =1 c.ft.)

(d) Six thousand and seventy-seven bags of charcoal were manufactured by burning 435 lots of 52,200 c.ft. of fuel.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1931-32 and Agency of Exploitation—*cont.*

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
SIXTH CIRCLE—*cont.*															
IV. Unreserved Lands—cont.															
The Nilgiris	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palghat	..	8	..	..	8	..	..	..	..	..	..	..	..	..	..
Total ..	118	8	..	..	126	..	..	..	..	..	..	..	..	..	..
Grand Total ..	618	59	..	..	677	72	..	..	..	72	75	2	..	..	77
TOTAL PRESIDENCY.						Engineering division—Nil.									
Reserves	486	460	20	39	1,005	64	233	4	1	302	164	44	..	..	208
Leased forest ..	143	..	..	..	143	26	..	..	..	26	..	1	..	..	1
Unreserved lands ..	120	219	47	..	386	3	94	3	..	100	..	..	..	..	..
Total ..	749	679	67	39	1,534	92	327	7	1	427	164	45	..	..	209

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1931-32 and Agency of Exploitation—*cont.*

Division.	Miscellaneous.					Total timber.					Fuel.					Total outturn.
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
SIXTH CIRCLE—*cont.*																
IV. Unreserved Lands—cont.																
The Nilgiris ..	..	..	..	..	..	..	..	..	..	..	..	20	..	..	20	20
Palghat	..	..	3	..	3	..	8	3	..	11	..	70	..	..	70	81
Total ..	..	34	3	16	53	118	42	3	16	179	..	221	..	11	232	411
Grand Total ..	..	56	3	16	75	765	117	3	16	901	482	1,838	..	11	2,331	3,232
TOTAL PRESIDENCY.																
Reserves	41	135	4	..	180	755	872	28	40	1,695	1,016	16,427	115	1	17,559	19,254
Leased Forest ..	..	..	..	..	..	168	1	..	..	169	..	6	..	..	6	175
Unreserved lands ..	2	599	84	16	701	125	912	134	16	1,187	2	1,263	..	11	1,276	2,463
Total ..	43	734	88	16	881	1,048	1,785	162	56	3,051	1,018	17,696	115	12	18,841	(*a*) 21,892
										(*b*) + 61						(*b*) + 61
										(*c*) + 75						(*c*) + 75
										3,187						22,028

(*a*) The total outturn excludes the figures for Parlakimedi Maliahs (i.e., 47 cubic feet of timber and 128 cubic feet of fuel).
(*b*) Represents the log equivalent of sawn timber.
(*c*) Do. square timber.

NOTE.—
GOVERNMENT AGENCY—Actuals.
PRIVATE AGENCY.—
Forest Department.—Based on figures furnished by contractors.
REVENUE DEPARTMENT.—
North and South Mangalore.—Based on taluk accounts and also in the case of fuel by conversion of money value at 10 annas per cart-load of 20 c.ft.
Wynaad.—Money value converted at 6 annas per cubic foot for timber and 8 annas per cart-load of 20 c.ft. for fuel.
The Nilgiris.—Converted from money value at 4 annas per cart-load of 20 c.ft. of fuel.
Palghat.—Converted from money value at 4 annas per cubic foot of timber and 6 pies per cubic foot of fuel.
RIGHT-HOLDERS AND FREE GRANTEES.—Actuals.

ANNUAL FORM No. 36.

Forest Department, Madras Presidency.

Outturn of Minor Forest Produce during the year 1931-32.

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
	Reserved Forests.	Rs.	Rs.	Rs.	Rs.	Rs.
First Circle.	Bamboos	121	64,305	1,172	..	65,598
	Grazing	..	1,01,754	15,180	625	1,17,559
	Other produce.					
	Grass (hay, thatch, etc.) ..	31	1,014	..	..	1,045
	Tamarind, soapnuts, galnuts, nux-vomica, shekoi, etc.	8,108	4,369	..	..	12,477
	Horns, skins, wax, resin, gum, honey, etc.	..	115	..	..	115
	Tangedu, etc., barks and fibres, sarasaparilla, etc.	534	2,703	..	..	3,237
	Date and palmyra leaves, stalks, moduga leaves, etc.	..	147	..	..	147
	Manure leaves, thorns, etc. ..	..	252	..	..	252
	Stone, gravel, etc.	..	479	..	..	479
	Lease of shandies	..	6,100	..	..	6,100
	Miscellaneous	1,730	1,227	..	335	3,292
	Total, Other produce ..	10,403	16,406	..	335	27,144
	Total, Reserved Forests ..	10,524	1,82,465	16,352	960	2,10,301
	Reserved Lands.					
	Bamboos	..	25,376	..	..	25,376
	Other produce.					
	Grass (hay, thatch, etc.) ..	..	..	..	..	..
	Tamarind, soapnuts, galnuts, nux-vomica, shekoi, etc.	..	20,186	..	..	20,186
	Horns, skins, wax, resin, gum, honey, etc.	..	59	..	..	59
	Tangedu, etc., barks and fibres, sarasaparilla, etc.	..	197	..	..	197
	Date and palmyra leaves, etc. ..	..	294	..	..	294
	Miscellaneous	..	105	..	..	105
	Total, other produce ..	..	20,841	..	..	20,841
	Total, Reserved Lands ..	..	46,217	..	..	46,217
	Unreserves.					
	Bamboos	23	4,699	..	..	4,722

Outturn of Minor Forest Produce during the year 1931-32—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
	Other produce.	Rs.	Rs.	Rs.	Rs.	Rs.
First Circle—*cont.*	Grass (hay, thatch, etc.) ..	12	129	..	..	141
	Tamarind, soapnuts, galnuts, nux-vomica, shekoi, etc.	138	4,247	..	..	4,385
	Horns, skins, wax, resin, gum, honey, etc.	..	61	..	..	61
	Tangedu, barks and fibres, sarasaparilla, etc.	..	103	..	..	103
	Date and palmyra leaves, stalks and moduga, etc., leaves.	..	297	395	..	692
	Manure leaves, thorns, etc. ..	..	86	..	..	86
	Stone, gravel, etc.	..	490	..	..	490
	Tree owners' fees	..	39,377	..	..	39,377
	Miscellaneous	87	2,592	..	..	2,679
	Total, other produce ..	237	47,382	395	..	48,014
	Total, Unreserves ..	260	52,081	395	..	52,736
	Abstract.					
	Bamboos	144	94,380	1,172	..	95,696
	Grazing	..	1,01,754	15,180	625	1,17,559
	Other minor produce	10,640	84,629	395	335	95,999
	Total ..	10,784	2,80,763	16,747	960	3,09,254
	Reserves.					
	Bamboos	260	58,517	227	1	59,005
	Grazing	..	1,47,537	..	3,985	1,51,522
	Fodder grass	..	2,153	..	..	2,153
	Penning fees	..	3,700	..	..	3,700
	Total ..	..	1,53,390	..	3,985	1,57,375
Second Circle.	*Minor forest produce.*					
	Grass (hay, thatch, etc.) ..	69	386	22	..	477
	Tamarind, soapnuts and nux-vomica.	..	1,858	..	..	1,858
	Stone, gravel and earth ..	..	4,403	..	..	4,403
	Date, palmyra and plate leaves..	..	1,599	..	..	1,599
	Manure leaves, bats' dung and thorns.	..	2,147	..	1	2,148
	Tooki leaves	..	5,306	..	..	5,306
	Horns, honey, wax, resin, gum and galnuts.	.. ..	2,276	..	..	2,276
	Tangedu, rela, yepi and seeds..	50	10,622	..	..	10,672
	Miscellaneous including tree-tapping fees and amaroy.	..	1,483	..	..	1,483
	Total of minor forest produce.	119	30,080	22	1	30,222
	Grand total of grazing and minor forest produce of Reserves.	119	1,83,470	22	3,986	1,87,597

Outturn of Minor Forest Produce during the year 1931-32—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
	Unreserves.	Rs.	Rs.	Rs.	Rs.	Rs.
Second Circle—*cont.*	Bamboos	..	8	..	..	8
	Minor forest produce.					
	Thatch grass and palmyra leaves.	..	1	..	..	1
	Tamarind, soapnuts and nux-vomica.	..	1,876	..	..	1,876
	Stone, gravel and earth ..	..	2,967	..	..	2,967
	Date, palmyra and plate leaves.	..	101	107	..	208
	Manure leaves, bats' dung and thorns.	..	80	..	..	80
	Tangedu, rela, and yepi seeds ..	..	1,09,703	..	..	1,09,703
	Tooki leaves	..	2,568	..	..	2,568
	Miscellaneous including tree-tapping fees.	..	1,23,614	..	..	1,23,614
	Total of minor forest produce of Unreserves.	..	2,40,910	107	..	2,41,017
	Grand total of bamboos of Reserves and Unreserves.	260	58,525	227	1	59,013
	Grand total of grazing and minor forest produce of Reserves and Unreserves.	119	4,24,380	129	3,986	4,28,614
Fourth Circle.	*Reserved Forests.*					
	Bamboos	49	1,21,872	166	..	1,22,087
	Grass and grazing	..	1,62,830	..	139	1,62,969
	Other minor produce.					
	Avaram, konnai, etc., barks ..	..	4,188	..	..	4,188
	Date, palmyra, tooki plate, etc., leaves.	..	1	..	..	1
	Manure leaves	..	6,122	..	..	6,122
	Stone, gravel, sand, etc. ..	..	3,011	..	..	3,011
	Soapnuts, galnuts, tamarind and nux-vomica.	..	2,643	..	..	2,643
	Lac	280	..	..	..	280
	Miscellaneous	818	16,560	24	..	17,402
	Total ..	1,098	32,525	24	..	33,647
	Reserved Lands.					
	Stone, gravel, etc.	..	5	..	..	5
	Manure leaves	..	828	..	..	828
	Total ..	..	833	..	..	833
	Unreserves.					
	Bamboos	..	23	174	..	197

Outturn of Minor Forest Produce during the year 1931-32—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
		Rs.	Rs.	Rs.	Rs.	Rs.
Fourth Circle—*cont.*	*Other produce.*					
	Avaram, konnai, etc., barks ..	..	2,452	..	..	2,452
	Date, palmyra, tooki plate, etc.	..	2,790	147	..	2,937
	Manure leaves	..	694	..	..	694
	Stone, gravel, sand, etc. ..	..	4,651	..	..	4,651
	Miscellaneous including tree tapping fees.	..	65,987	64	..	66,051
	Total ..	..	76,574	211	..	76,785
	Abstract.					
	Bamboos	49	1,21,895	340	..	1,22,284
	Grass and grazing	..	1,62,830	..	139	1,62,969
	Other produce	1,098	1,09,932	235	..	1,11,265
	Total ..	1,147	3,94,657	575	139	3,96,518
	Reserved Forests.					
	Bamboos	..	35,461	..	..	35,461
	Grazing	..	1,12,022	15	1,637	1,13,674
	Fodder grass	..	1,109	..	..	1,109
	Total ..	..	1,13,131	15	1,637	1,14,783
	Other produce.					
	Tamarind, gallnuts, soapnuts, cardamoms, dammer, jack, etc.	2,283	24,393	..	..	26,676
	Avaram, konnai, pungam seeds.	..	5,376	..	..	5,376
	Date leaves, korai grass, kaya leaves, manure leaves, usufructs of palmyra, etc.	..	6,047	..	..	6,047
	Stones, gravel, tree moss, usufructs of trees, metal and rough stone.	..	6,429	..	610	7,039
	Deer horns, sambur horns, honey, shekoi, wax, tusks, etc.	683	1,370	..	..	2,053
	Miscellaneous	..	4,611	..	..	4,611
	Total ..	2,966	48,226	..	610	51,802
Fifth Circle.	*Unreserved Lands.*					
	Bamboos	..	5	..	..	5
	Other produce.					
	Avaram, konnai, amroy ..	..	3,043	..	..	3,043
	Sivajama tree tax, fees on trees, stones, gravel, limestone, etc.	..	5,755	..	..	5,755
	Usufructs of trees, palmyras, tamarind, gallnuts, etc.	..	9,634	..	..	9,634

Outturn of Minor Forest Produce during the year 1931-32—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
		Rs.	Rs.	Rs.	Rs.	Rs.
Fifth Circle—*cont.*	*Other produce*—cont.					
	Kaya leaves, korai grass, manure leaves sambur and fodder grass	..	4,786	..	..	4,786
	Miscellaneous	..	3,984	2	..	3,986
	Total ..	..	27,202	2	..	27,204
	Abstract.					
	Bamboos	..	35,466	..	..	35,466
	Grazing and fodder grass ..	..	1,13,131	15	1,637	1,14,783
	Other produce	2,966	75,428	2	610	79,006
	Total ..	2,966	2,24,025	17	2,247	2,29,255
Sixth Circle.	*Reserved Forests.*					
	Bamboos	5,419	19,533	11	..	24,963
	Grazing and fodder grass ..	275	28,036	248	..	28,559
	Other produce.					
	Stones, gravel, etc.	..	2,754	..	..	2,754
	Canes	6	323	2	..	331
	Wood oil	..	350	..	..	350
	Catechu trees	..	2,750	..	..	2,750
	Cardamom	..	2,415	..	..	2,415
	Other items including tusks, etc.	705	15,794	5	..	16,504
	Total ..	711	24,386	7	..	25,104
	Total, Reserves ..	6,405	71,955	266	..	78,626
	Reserved Lands.					
	Bamboos	..	93	..		93
	Canes, etc.	..	1	..	..	1
	Grazing and fodder grass ..	..	..	588	..	588
	Total, Reserved Lands ..	..	94	588	..	682
	Leased Forests.					
	Bamboos	1,138	1,164	..	..	2,302
	Other minor produce	..	200	..	..	200
	Total, Leased Forests ..	1,138	1,364	..	..	2,502
	Unreserved Lands.					
	Bamboos	..	44	..	..	44

Outturn of Minor Forest Produce during the year 1931-32—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
	Other produce.	Rs.	Rs.	Rs.	Rs.	Rs.
Sixth Circle—*cont.*	Stones, gravel, etc.	..	820	..	..	820
	Other items	..	5,021	..	..	5,021
	Total, Unreserved Lands ..	..	5,885	..	..	5,885
	Abstract.					
	Bamboos	6,557	20,834	11	..	27,402
	Grazing and fodder grass ..	275	28,036	836	..	29,147
	Other produce	711	30,428	7	..	31,116
	Grand total ..	7,543	79,298	854	..	87,695
Parlakimedi Maliahs.	Bamboos	..	4,022	163	125	4,310
	Grazing	..	1,358	..	..	1,358
	Other produce	209	13,609	37	15	13,870
	Total ..	209	18,989	200	140	19,538
Total, Presidency.	*Reserved Forests.*					
	Bamboos	5,849	2,99,688	1,576	1	3,07,114
	Grazing	275	5,59,141	15,443	6,386	5,81,245
	Other produce	15,297	1,51,623	53	946	1,67,919
	Reserved Lands.					
	Bamboos	..	29,491	163	125	29,779
	Grazing	..	1,358	588	..	1,946
	Other produce	209	35,284	37	15	35,545
	Unreserved Lands.					
	Bamboos	23	4,779	174	..	4,976
	Grazing	..	..	..	..	..
	Other produce	237	3,97,913	715	..	3,98,865
	Leased Forests.					
	Bamboos	1,138	1,164	..	..	2,302
	Grazing	..	..	..	..	..
	Other produce	..	200	..	..	200
Grand total, Presidency.	Bamboos	7,010	3,35,122	1,913	126	3,44,171
	Grazing	275	5,60,499	16,031	6,386	5,83,191
	Other produce	15,743	5,85,020	805	961	6,02,529
	Total ..	23,028	14,80,641	18,749	7,473	15,29,891

Annual Form No. 37.

Forest Department, Madras Presidency.

Account of Timber, Fuel, Bamboos and Minor Produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1931–32.

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
BAMBOOS (IN NUMBER).					
First Circle.					
Ganjam	..	2,329	2,329	(*b*) 2,329	..
Vizagapatam	150	640	790	(*b*) 790	..
Godavari, Upper	2,100	6,163	8,263	(*a*) 2,100 (*b*) 6,163	..
Do. Lower	..	2,150	2,150	(*a*) 2,000 (*b*) 150	..
Guntur	..	..	..	..	..
Nellore	..	818	818	(*b*) 818	..
Total	2,250	12,100	14,350	14,350	..
Second Circle.					
Anantapur	..	200	200	(*b*) 200	..
Kurnool, East	..	26,847	26,847	(*a*) 25,580 (*b*) 1,267	..
Do. South	..	60	60	(*b*) 60	..
Do. West	..	739	739	(*a*) 300 (*b*) 200	239
Cuddapah, North	..	1,700	1,700	(*b*) 1,700	..
Do. South	..	260	260	(*b*) 260	..
Total	..	29,806	29,806	29,567	239
Fourth Circle.					
Chittoor	..	..	..	..	..
Vellore	..	1,127	1,127	1,127	..
Salem, North	..	1,200	1,200	1,200	..
Do. Central	..	..	..	..	..
Do. South	285	..	285	285	..
Total	285	2,327	2,612	2,612	..
Fifth Circle.					
Coimbatore, North	..	1,000	1,000	1,000	..
Do. South	..	1,435	1,435	1,435	..
Total	..	2,435	2,435	2,435	..

Note for the First and Second Circles.—(*a*) Sold departmentally. (*b*) Used departmentally.

Account of Timber, Fuel, Bamboos and Minor Produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1931-32—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
Sixth Circle.	BAMBOOS (IN NUMBER).				
Mangalore, North	..	100	100	(*a*) 100	..
Do. South	..	4,437	4,437	(*a*) 4,437	..
Wynaad	..	16,831	16,831	(*a*) 16,306	525
Nilambur	(*d*) 34,936	77,330	112,266	(*b*) 99,131 (*a*) 3,031 (*b*) 9,915	189
Palghat	4,943	11,806	16,749	(*c*) 12,362	4,387
Total	39,879	110,504	150,383	1,45,282	5,101
Grand total, Presidency	42,414	1,57,172	199,586	1,94,246	5,340
First Circle.	TIMBER (IN THOUSANDS OF CUBIC FEET).				
Ganjam	36	..	36	(*a*) 36	..
Vizagapatam	..	7	7	(*a*) 7	..
Godavari, Upper	84	11	95	(*a*) 87 (*b*) 2	6
Do. Lower	3	7	10	(*a*) 2	8
Guntur	..	..	..	..	..
Nellore	..	..	..	..	..
Total	123	25	148	134	14
Second Circle.					
Anantapur	..	..	..	..	..
Kurnool, East	1	5	6	(*a*) 3 (*b*) 1	2
Do. South	3	40	43	(*a*) 21	22
Do. West	2	5	7	(*a*) 4	3
Cuddapah, North	..	1	1	(*a*) 1	..
Do. South	..	2	2	(*a*) 2	..
Total	6	53	59	32	27
Fourth Circle.					
Chittoor	..	2	2	2	..
Vellore	11	4	15	13	2
Salem, North	1	6	7	4	3
Do. Central	..	4	4	4	..
Do. South	1	..	1	1	..
Total	13	16	29	24	5
Fifth Circle.					
Kollegal	..	(*a*) 4	4	4	..
Coimbatore, North	3	(*a*) 17	20	18	2
Do. South	..	..	..	..	..
Non-commercial area	12	41	53	(*b*) 38	(*c*) 15
Commercial	131	130	261	107	154
Sawn timber	(*d*) 5	..	5	2	(*d*) 3
Valparai (scantlings)	..	2	2	2	..
Madura	1	1	2	1	1
Tinnevelly	3	4	7	6	1
Total	155	199	354	178	176

Note for the Sixth Circle.—(*a*) Used departmentally. (*b*) Sold. (*c*) Written off.

(*d*) Includes 26,617 bamboos on hand at Jeypore depot on 1st April 1931.

Note for the First and Second Circles.—(*a*) Sold departmentally. (*b*) Used departmentally.

Note for the Fourth Circle.—Timber includes sandalwood.

Account of Timber, Fuel, Bamboos and Minor Produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1931-32—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
	TIMBER (IN THOUSANDS OF CUBIC FEET)—*cont.*				
	[SLEEPERS (IN NUMBER).				
Coimbatore, South ..	..	..	..	..	..
Valparai, B.G.	1,204	10,248	11,452	.. 8,027	3,425
Sleepers, M.G.	717	5,124	5,841	4,086	1,755
Sixth Circle.	TIMBER (IN THOUSANDS OF CUBIC FEET).				
Mangalore, North	51	31	82	(*a*) 38 (*b*) .. 1 (*d*) 1	42 .. ..
Mangalore, South	83	140	223	(*a*) 115	108
Forest Utilization Officer (sawn timber).	25	24	49	38	11
Total, Mangalore, South ..	108	164	272	153	119
Wynaad	427	148	575	(*a*) 120 (*b*) 9 (*c*) 59 (*e*) 1	386 .. .. ..
Forest Utilization Officer (sawn timber).	9	..	9	(*a*) 8	1
Total, Wynad ..	436	148	584	197	387
Nilambur	(*g*) 552	313	865	(*a*) 406 (*b*) 1 (*c*) .. 13 (*f*) 40	405 .. .. ..
Forest Utilization Officer (sawn timber).	16	..	16	(*a*) 13	3
Total, Nilambur	568	313	881	473	408
The Nilgiris	77	9	86	(*a*) 29 (*c*) 1	56 ..
Palghat	(*h*) 37	130	167	(*a*) 154	13
Forest Utilization Officer (sawn timber).	1	..	1	1	..
Total, Palghat	38	130	168	155	13
Total, Sixth circle ..	1,278	795	2,073	1,048	1,025
Parlakimedi Maliahs ..	1	5	6	6	..
Grand total, Presidency ..	1,571	1,093	2,664	1,420	1,244

Note for the Fifth Circle.—(*a*) Includes sandalwood 2 quarters being equal to 1 cubic foot.
(*b*) Includes 166·72 cubic feet written off and 447·81 cubic feet used departmentally.
(*c*) Includes 757 cubic feet to be written off.
(*d*) Represents sawn timber in charge of the Forest Utilization Officer at Pollachi depot.

Note for the Sixth Circle.—(*a*) Sales. (*b*) Used departmentally. (*c*) Written off.
(*d*) Supplied as specimen to Dehra Dun.
(*e*) Difference in remeasurement eliminated.
(*f*) Converted into sleepers.

(*g*) Includes 156 thousands of cubic feet of timber on hand at Beypore depot on 1st April 1931.
(*h*) Includes two thousand cubic feet of timber from the Forest Engineer, Coimbatore.

Account of Timber, Fuel, Bamboos and Minor Produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1931-32—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
MINOR FOREST PRODUCE (IN QUARTERS OF 28 LB).					
First Circle.					
Ganjam	..	1,184	1,184 ..	(*b*) 1,184	..
Vizagapatam	81	73	154 ..	(*a*) .. 103 (*b*) .. 12	39
Godavari, Upper	373	4,234	4,607 ..	(*a*) .. 36 (*b*) 4,138	433
Do. Lower	72	267	339 ..	(*b*) .. 205	134
Guntur	15	42	57	(*b*) .. 53	4
Nellore	9,286	16,867	26,153	(*a*) 15,227 (*b*) 378 (*c*) 2,676	7,872
Total ..	9,827	22,667	32,494	24,012	8,482
Second Circle.					
Anantapur	54	58	112	(*b*) 103	9
Kurnool, East	26	3,670	3,696	(*b*) .. 3,681 ..	15
Do. South	170	300	470	(*b*) 170	300
Do. West	..	321	321	(*b*) 214	107
Cuddapah, North	565	808	1,373	(*b*) 1,109	264
Do. South	48	.. 1,298	1,346	(*b*) 1,140 (*c*) 2	204
Total ..	863	6,455	7,318	6,419	899
Fourth Circle.					
Chittoor	272	2	274	194	80
Vellore	399	611	1,010	573	437
Salem, North	367	683	1,050	701	349
Do. Central	23	90	113	23	90
Do. South	237	154	391	283	108
Total ..	1,298	1,540	2,838	1,774	1,064
Fifth Circle.					
Coimbatore, North ..	2,844	(*d*) 82	(*d*) 2,926	(*d*) 2,906	(*d*) 20
Do. South ..	42	(*d*) and (*e*) 70	(*d*) and (*e*) 112	(*d*) and (*e*) 59	(*d*) and (*e*) 53
Madura	..	3	3	(*f*)	3
Tinnevelly	..	(*d*) and (*e*) 54	(*d*) and (*e*) 54	(*d*) and (*e*) 46	(*d*) 8
Total ..	2,886	209	3,095	3,011	84
Sixth Circle.					
Mangalore, North	8	8	16	10	6
Wynaad	..	3	3	..	3
The Nilgiris	10	940	950	(*i*) 109 (*j*) 652	189
Total ..	18	951	969	771	198
Parlakimedi Maliahs ..	14	35	49	29	20
Grand total, Presidency ..	14,906	31,857	46,763	36,016	10,747

Note for the First and Second Circles.—(*a*) Sold departmentally. (*b*) Used departmentally. (*c*) Written off.
Note.—Timber includes sandalwood.
Note for the Fifth Circle.—(*d*) Includes seeds one measure being equal to one lb. (*e*) Includes seeds, one bag being equal to two quarters. (*f*) Shown as nil as only 11 lb. of Broodlac was used for inoculation.
Note for the Sixth Circle.—(*i*) Sold, (*j*) Used departmentally.

Account of Timber, Fuel, Bamboos and Minor Produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1931–32—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
FUEL (IN THOUSANDS OF CUBIC FEET).					
First Circle.					
Ganjam	1	20	21	(a) 18	3
Vizagapatam	..	2	2	(a) 1	1
Godavari, Upper	..	2	2	(a) 2	..
Do. Lower	24	22	46	(a) 25	21
Guntur	6	36	42	(a) 33	9
Nellore	..	7	7	(a) 3	4
Total ..	31	89	120	82	38
Second Circle.					
Anantapur	1	4	5	(a) 4	1
Kurnool, East	..	..	..	..	..
Kurnool, South	23	2	25	(a) 25	..
Kurnool, West	3	76	79	(a) 16	62
				(b) 1	
Cuddapah, North	21	13	34	(a) 26	6
Cuddapah, South	6	254	260	(a) 254	8
Total ..	54	349	403	326	77
Fourth Circle.					
Chittoor	14	13	27	16	11
Vellore	19	25	44	22	22
Salem, North	4	9	13	11	2
Salem, Central	12	25	37	19	18
Salem, South	9	18	27	16	11
Total ..	58	90	148	84	64
Fifth Circle.					
Coimbatore, South ..	11	2	13	13	..
Madura	6	5	11	10	1
Total ..	17	7	24	23	1
Sixth Circle.					
Mangalore, North	2	2	4	(i) 2	2
Do. South	..	8	8	..	8
The Nilgiris	349	420	769	(i) 650	119
Total ..	351	430	781	652	129
Parlakimedi Maliahs ..	56	41	97	54	43
Grand total, Presidency ..	567	1,006	1,573	1,221	352

Note for the First and Second Circles.—(a) Sold departmentally. (b) Written off.
Note for the Sixth Circle.—(i) Sold.

ANNUAL FORM No. 38.

Forest Department, Madras Presidency.

Statement showing the value of timber and other produce at sale depots for the year 1931-32.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	First Circle.			RS.			RS.	RS.	RS.
Vizagapatam.	Timber ..	4	67	17	..	..	..	..	17
Godavari Lower.	..	..	..	..	660	3,824	1,484	1,484	..
	Total timber ..	4	67	17	660	3,824	1,484	1,467	..
Vizagapatam.	Fuel	..	..	..	..	600	32	32	..
Nellore	.. ..	..	230	4	..	400	63	59	..
	Total fuel ..	..	230	4	..	1,000	95	91	..
			QRS.			QRS.			
Vizagapatam.	Minor forest produce.	..	81	32	..	34	18	..	14
Nellore ..	Do.	..	9,317	4,266	..	7,872	4,406	140	..
	Total minor forest produce.	..	9,398	4,298	..	7,906	4,424	126	..
	Grand total, First Circle.	..	..	4,319	..	..	6,003	1,684	..
	Second Circle.								
Kurnool, South.	Timber ..	..	3,112	3,077	..	22,574	8,200	5,123	..
	Total ..	..	3,112	3,077	..	22,574	8,200	5,123	..
Kurnool, South.	Fuel	..	23,137	402	..	84	1	..	401
	Total ..	..	23,137	402	..	84	1	..	401
	Grand, total ..	..	..	3,479	..	..	8,201	4,722	..
	Fourth Circle.								
Chittoor ..	Timber ..	24	45	4	47	229	206	202	..
	Fuel	..	13,732	1,287	..	10,900	1,022	..	265
Vellore ..	Timber ..	..	10,315	2,03,811	..	1,116	8,917	..	1,94,894
			QRS.			QRS.			
	Minor forest produce.	..	275	138	..	270	86	..	52
Salem, North.	Timber ..	..	988	3,650	..	2,979	6,746	3,096	..
	Fuel	..	4,000	105	..	2,484	51	..	54
			QRS.			QRS.			
	Minor forest produce.	..	367	692	..	349	854	162	..
Salem, Central.	Timber ..	..	41	533	..	47	624	91	..
	Fuel	..	12,313	548	..	18,000	549	1	..
			QRS.			QRS.			
	Minor forest produce.	..	20	70	..	90	119	49	..

Statement showing the value of timber and other produce at sale depots for the year 1931-32—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year. Number.	Cubic feet.	Value.	On hand at close of the year. Number.	Cubic feet.	Value.	Difference in value. In favour of the year.	Against the year.
	Fourth Circle—cont.			Rs.			Rs.	Rs.	Rs.
Salem, South.	Timber	..	714	1,320	..	655	1,225	..	95
	Fuel	..	8,880	162	..	10,567	276	114	..
	Bamboos	285	..	30	..	..	..	..	30
	Minor forest produce.	..	Qrs. 237	162	..	Qrs. 108	75	..	87
	Total	..	..	2,12,512	..	..	20,750	..	1,91,762
	Fifth Circle.								
Coimbatore, North.	Timber	..	..	..	..	347	347	347	..
	Sandalwood	..	2,809	56,180	..	1,485	32,670	..	23,510
	Sambur and deer horns.	Qrs. 29	..	119	Qrs. 15	..	41	..	78
	Gallnuts	Qrs. 2,813	..	3,516	..	..	..	..	3,516
Coimbatore, South.	Timber	..	49,247	56,182	..	63,156	89,362	33,180	..
	Sawn timber	..	5,507	9,400	..	3,339	3,330	..	6,070
	Spokes and felloes.	Sets 12	132	1,372	Sts. 201	2,211	3,388	2,016	..
Madura	Timber	..	270	95	..	416	153	58	..
	Brake-poles	No. 304	304	76	295	295	74	..	2
	Sandalwood	Lb. 20	..	10	..	..	..	..	10
	Fuel	..	6,055	757	..	515	64	..	693
	Charcoal	..	44	35	..	..	..	..	35
	Seeds	Mes. 547	..	27	Mes. 18	..	1	..	26
	Lac	Lb. 26	..	14	Lb. 67	..	21	7	..
Tinnevelly.	Timber	..	3,516	4,611	..	875	209	..	4,402
	Sandalwood	..	30	825	..	(a) 31	171	..	654
	Fuel	..	460	86	..	..	..	..	86
	Seeds	..	..	..	lb. 234	..	292	292	..
Abstract	Timber	..	53,033	60,888	..	64,794	90,071	29,183	..
	Sawn timber (b)	..	5,507	9,400	..	3,339	3,330	..	6,070
	Brakepoles	304	304	76	295	295	74	..	2
	Sandalwood	..	2,839	57,015	..	1,516	32,841	..	24,174
	Spokes and felloes.	Sts. 12	132	1,372	Sts. 201	2,211	3,388	2,016	..
	Fuel	..	6,515	793	..	515	64	..	729
	Charcoal	..	44	35	..	..	..	..	35
	Sambur and deer horns.	Qrs. 29	..	119	Qrs. 15	..	41	..	78

(a) Includes quarters 34-14 lb. and 8 bags of sapwood valued at Re. 0-1-0 per quarter.
(b) Represents sawn timber in charge of the Forest Utilization Officer at Pollachi depot.

Statement showing the value of timber and other produce at sale depots for the year 1931-32—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year. Number.	Cubic feet.	Value.	On hand at close of the year. Number.	Cubic feet.	Value.	Difference in value. In favour of the year.	Against the year.
	Fifth Circle—cont.			Rs.			Rs.	Rs.	Rs.
Abstract.	Gallnuts ..	QR. 2,813	..	3,516	..	..	..	..	3,516
	Seeds	MES. 547	..	27	MRS. 18 and LB. 234	..	293	266	..
	Lac	LB. 26	..	14	LB. 67	..	21	7	..
	Total ..	..	..	1,33,255	..	..	1,30,123	3,132	..
	Sixth Circle.								
Mangalore, North.	Timber ..	..	82,536	30,442	..	38,337	28,812	..	1,630
Mangalore, South.	Do. ..	..	28,292	34,878	..	19,994	26,450	..	8,428
Forest Utilization Officer.	Sawn Timber.	..	24,574	30,400	..	11,153	11,270	..	19,130
	Total, Mangalore, South.	..	52,866	65,278	..	31,147	37,720	..	27,558
Wynaad .. Forest Utilization Officer.	Timber ..	..	153,223	2,87,864	..	1,65,417	3,21,421	33,557	..
	Sawn Timber.	..	9,466	15,400	..	1,438	900	..	14,500
	Total, Wynaad.	..	162,698	3,03,264	..	166,855	3,22,321	19,057	..
Nilambur ..	Timber ..	..	*171,118	*93,778	..	138,119	79,424	..	14,354
Palghat Forest Utilization Officer.	Sawn Timber.	..	1,344	1,277	..	..	..	..	1,277
	Total, Palghat.	..	1,344	1,277	..	..	..	..	1,277
	Total, Sixth Circle.	..	420,553	4,94,039	..	374,458	4,68,277	..	25,762

* Correct figure adopted.

Factor of conversion: Sandalwood 2 qr = 1 c.ft. Charcoal 40 lb. = 1 c.ft.

1 set of spokes and felloes = 11 c.ft.

1 brake pole—1 c.ft.

Statement showing the value of timber and other produce at sale depots for the year 1931-32—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
				Rs.			Rs.		Rs.
Parlakimedi Maliahs.	Timber ..	356	1,230	1,727	258	283	194	..	1,533
	Fuel ..	564	56,400	2,256	433	43,300	1,732	..	524
	Minor forest produce. ..	..	Q.R. 13·71	538	..	Q.R. 22·72	136	..	402
Total, Presidency.	Timber ..	..	..	8,27,619	..	..	6,22,247	..	2,05,272
	Fuel ..	..	..	5,592	..	..	3,790	..	1,802
	Minor forest produce. ..	..	..	9,574	..	..	6,049	..	3,525
	Bamboos ..	..	..	30	..	..	..	..	30
Grand Total, Presidency.	.. ..	..	..	8,42,716	..	..	6,32,086	..	2,10,629

Annual Form No. 39.

Forest Department, Madras Presidency.

Summary of Revenue of the different districts, 1931-32.

Budget head.	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total.	Parlakimedi Maliahs.	Golgonda Agency.	Grand total.
First Circle.											
VIII. Forest Receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(*a*) Timber and other produce removed from the forests by Government Agency—											
Sandalwood ..	..	..	35	..	..	..	..	35	..	..	35
Other produce—											
Timber ..	..	2,590	4,660	29,302	498	18	..	37,058	3,157	3,043	43,258
Firewood and charcoal.	(D) 146	1,306	47	100	1,655	268	154	3,676	2,148	..	5,824
Bamboos ..	..	18	..	60	..	..	..	78	..	..	78
Other minor produce.	(N) 5,148	14	52	..	2	..	5,107	10,323	208	..	10,531
(*b*) Timber and other produce removed from the forests by consumers or purchasers—											
Forest Department—											
Timber ..	..	4,271	138	642	10,617	601	14	16,283	6,521	752	23,556
Firewood and charcoal.	(N) 51,545	26,345	6,224	374	36,535	23,357	28,616	1,72,896	5,553	..	1,78,450
Bamboos ..	..	4,102	18,231	14,482	47,383	10,176	..	94,374	4,022	130	98,526
Grazing and fodder grass.	..	8,303	2,154	8,425	17,977	42,332	22,563	1,01,754	1,358	281	1,03,392
Other minor produce.	(D) 130	1,780	6 100	4,362	25,472	3,997	811	42,652	13,609	700	56,961

(N) Relates to Nellore.

(D) Direction.

Summary of Revenue of the different districts, 1931-32—*cont.*

Budget head.	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total	Parlakimedi Maliahs.	Golgonda Agency.	Grand total.
FIRST CIRCLE—*cont.*		RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
VIII. Forest Receipts —cont.											
(*b*) Timber and other produce removed from the forests by consumers or purchasers—*cont.* Revenue Department—											
Timber ..	..	7,275	1,195	..	4,783	811	1,685	15 749	..	..	15,749
Firewood and charcoal.	..	2,691	860	..	1,427	5,519	1,715	12 212	..	..	12,212
Bamboos ..	..	116	..	..	..	..	17	133	..	..	133
Other minor produce.	..	2,173	1,358	— 1,018	20,360	10,646	4,894	38,413	..	..	38,413
(*c*) Drift and waif-wood and confiscated forest produce.	..	307	74	1,143	2,250	284	185	4,243	57	1	4,301
(*d*) Profits from Government Commercial undertakings.	..	..	..	..	..	..	..	..	..	..	..
(*e*) Recoveries of indirect charges from Government Commercial undertakings.	..	..	..	..	..	..	..	..	..	..	..

Summary of Revenue of the different districts, 1931-32—*cont.*

Budget head.	Direction.	Ganjam.	Vizagapatam.	Godavari Upper.	Godavari Lower.	Guntur.	Nellore.	Total.	Parlakimedi Maliahs.	Golgonda Agency.	Grand total.
FIRST CIRCLE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
VIII. Forest Receipts—cont.											
(g) Miscellaneous—											
Fines and forfeitures.	(N) 205	610	146	25	1,180	778	1,142	4,086	132	..	4,218
Rents of buildings.	(D) 45	1,472	333	1,728	1,778	365	754	6,475	187	80	6,742
Other sources ..	(D) 196	6,405	3,073	1,612	6,563	13,721	6,955	38,525	981	58	39,564
Total ..	57,415	69,778	44,680	61,237	1,78,470	1,12,873	74,512	5,98,965	37,933	5,045	6,41,943
(h) *Deduct*—Refunds—Voted—Refunds by Forest Officers.	..	1,222	322	569	202	1,356	462	4,133	81	1	4,215
Total ..	57,415	68,556	44,358	60,668	1,78,268	1,11,517	74,050	5,94,832	37,852	5,044	6,37,728

(N) Relates to Nellore. (D) Direction.

Summary of Revenue of the different districts, 1931-32—*cont.*

Budget heads.	Direction.	Anantapur.	Karnool, East.	Karnool, South.	Karnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
SECOND CIRCLE.								
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
VIII. Forest Receipts.								
(*a*) Timber and other produce removed from forests by Government Agency—								
Other produce—								
Timber	..	23	1,179	12,089	4,109	51	6,008	23,459
Firewood and charcoal	..	32	..	18	627	59	26	762
Bamboos	..	..	224	..	4	..	..	228
Other minor produce	..	..	..	..	..	..	7	7
Total (*a*)	..	55	1,403	12,107	4,740	110	6,041	24,456
(*b*) Timber and other produce removed from the forests by consumers or purchasers—	..	..						
Forest Department—								
Timber	..	2,436	395	16,662	3,127	2,993	1,872	27,485
Firewood and charcoal	..	1,875	929	5,448	5,555	22,054	66,920	1,02,781
Bamboos	..	1,105	1,620	25,281	18,740	5,077	6,850	58,673
Grazing and fodder grass	..	23,561	31,407	19,065	32,443	29,811	15,123	1,51,410
Other minor produce	..	9,758	1,769	1,975	10,177	2,941	4,208	30,828
Total, Forest Department	..	38,735	36,120	68,431	70,042	62,876	94,973	3,71,177
Revenue Department—								
Timber	..	10,841	352	531	2,596	462	391	15,173
Firewood and charcoal	..	3,377	388	648	2,593	443	147	7,596
Bamboos	..	8	..	..	..	..	..	8
Other minor produce	..	1,94,920	2,320	4,825	29,745	3,379	6,165	2,41,354
Total, Revenue Department	..	2,09,146	3,060	6,004	34,934	4,284	6,703	2,64,131
Total (*b*)	..	2,47,881	39,180	74,435	1,04,976	67,160	1,01,676	6,35,308
(*c*) Drift and waifwood and confiscated forest produce	..	146	29	511	451	386	1,071	2,594

Summary of Revenue of the different districts, 1931-32—*cont.*

Budget heads.	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
SECOND CIRCLE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
VIII. Forest Receipts—cont.								
(*e*) Miscellaneous—								
Fines and forfeitures	..	146	215	3,262	1,511	1,718	1,796	8,648
Rents of buildings	..	470	1,209	2,406	2,539	1,645	1,326	9,595
Other sources	83	12,172	5,437	7,127	13,588	8,096	7,260	53,763
Total (*e*)	83	12,788	6,861	12,795	17,638	11,459	10,382	72,006
Total	83	2,60,870	47,473	99,848	1,27,805	79,115	1,19,170	7,34,364
(*h*) *Deduct*—Refunds—Voted—								
Refunds by Forest officers	..	1,574	226	35	45	217	449	2,516
Grand Total	83	2,59,296	47,247	99,813	1,27,760	78,898	1,18,751	7,31,848

NOTE.—This return excludes the revenue of Rs. 1,138 realized in IV Circle on account of sale of sandalwood, as it will be included in the return of IV Circle.

Summary of Revenue of the different districts, 1931–32—*cont.*

Budget heads.	Direction.	Working Plans, Mount Stuart.	Working Plans, Mangalore.	Working Plans, Lower Godavari.	Working Plans, North Coimbatore.	Working Plans, Wynaad.	Working Plans, Palghat.	Working Plans, Tinnevelly.	Provincial Sylviculturist.	Total.
THIRD (WORKING PLANS) CIRCLE.										
VIII. Forest Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.		RS.	RS.
(*a*) Timber and other produce removed from forests by Government Agency—										
Other produce—										
Timber	..	..	..	..	..	..	..	..	14	14
(*e*) Miscellaneous—										
Fines and forfeitures ..	..	..	..	..	..	..	..	..	5	5
Rents of buildings	416	..	..	22	15	..	..	..	169	622
Other sources	60	..	14	40	8	8	20	..	47	197
Total (*e*) ..	476	..	14	62	23	8	20	..	221	824
Total ..	476	..	14	62	23	28	20	..	235	838
(*h*) *Deduct*—Refunds—Voted—										
Refunds by forest officers ..	..	..	..	..	..	..	..	..	..	..
Grand Total ..	476	..	14	62	23	8	20	..	235	838

Summary of Revenue of the different districts, 1931-32—*cont.*

Budget heads.	Direction.	Chittoor.	Vellore.	North Salem.	Central Salem.	South Salem.	Total.
FOURTH CIRCLE.							
VIII. Forest Receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(a) Timber and other produce removed from forests by Government Agency—							
Sandalwood	* 7,186	464	1,31,544	92,494	13,371	13,780	2,58,839
Other produce—							
Timber	..	3,035	7	171	..	..	3,213
Firewood and charcoal	..	68	816	59	633	148	1,724
Bamboos	..	..	40	..	..	..	40
Other minor produce	..	..	138	123	..	1	262
Total	..	3,103	1,001	353	633	149	5,239
Total (*a*)	* 7,186	3,567	1,32,545	92,847	14,004	13,929	2,64,078
(*b*) Timber and other produce removed from the forests by consumers or purchasers—							
Forest Department—							
Timber	..	296	368	41	1,157	..	1,862
Firewood and charcoal	..	10,239	14,978	1,098	33,915	2,574	62,804
Bamboos	..	11,930	81,005	9,480	13,405	6,024	1,21,844
Grazing and fodder grass	..	22,453	41,308	29,668	50,969	18,432	1,62,830
Other minor produce	..	5,449	13,658	2,725	5,583	8,460	35,875
Total, Forest Department	..	50,367	1,51,317	43,012	1,05,029	35,490	3,85,215
Revenue Department—							
Timber	..	3,464	10,514	2,848	6,372	17,495	40,693
Firewood and charcoal	..	2,285	13,401	1,095	4,023	4,574	25,378
Bamboos	..	..	23	..	..	..	23
Other minor produce	..	8,856	24,090	8,236	13,494	19,849	74,525
Total, Revenue Department	..	14,605	48,028	12,179	23,889	41,918	1,40,619
Total (*b*)	..	64,972	1,99,345	55,191	1,28,918	77,408	5,25,834

* Sandalwood revenue relating to other circles—

	Rs.
Madura	11
Tinnevelly	6,031
Anantapur	1,049
South Cuddapah	90
Public Works Department, Executive Engineer.	5
Total	7,186

Summary of Revenue of the different districts, 1931–32—*cont.*

Budget heads.	Direction.	Chittoor.	Vellore.	North Salem.	Central Salem.	South Salem.	Total.
FOURTH CIRCLE—*cont.*							
VIII. Forest Receipts—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(*c*) Drift and waifwood and confiscated forest produce	..	96	197	48	166	129	636
(*d*) Miscellaneous—							
Fines and forfeitures	..	1,079	2,022	832	501	568	5,002
Rents of buildings	..	2,356	2,452	1,130	1,317	360	7,615
Other sources	232	6,221	21,773	6,476	19,919	10,819	65,440
Total (*d*)	232	9,656	26,247	8,438	21,737	11,747	78,057
Total	7,418	78,291	3,58,334	1,66,524	1,64,826	1,08,213	8,68,605
(*e*) *Deduct*—Refunds—Voted—							
Refunds by forest officers	..	906	8,864	505	4,019	1,132	15,416
Grand Total	7,418	77,385	3,49,480	1,56,019	1,60,806	1,02,081	8,53,189

Summary of Revenue of the different districts, 1931–32—*cont.*

Budget heads.	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
FIFTH CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
VIII. Forest Receipts.								
Timber and other produce removed from the forests by Government Agency—								
Sandalwood	1,39,789	..	37,657	..	..	..	..	(*a*) 1,77,446
Other produce—								
Timber	..	54	741	96,952	760	(*b*) 4,119	..	1,02,626
Firewood and charcoal	..	..	..	55	1,012	10	..	1,077
Bamboos	..	..	..	..	..	..	..	..
Other minor produce	..	..	2,357	487	..	..	..	2,844
Timber and other produce removed from the forests by consumers or purchasers—								
Forest Department—								
Timber	..	250	223	43,934	2,951	2,826	..	50,184
Firewood and charcoal	1,000	949	22,240	13,366	94,891	54,981	1,018	1,88,445
Bamboos	..	3,857	22,323	5,249	2,961	1,071	..	35,461
Grazing and fodder grass	..	44,724	34,662	4,279	21,314	7,286	866	1,13,131
Other minor produce	..	2,338	(*c*) 8,168	4,537	24,201	9,588	937	49,769
Revenue Department—								
Timber	..	938	4,666	1,000	6,131	97	336	13,168
Firewood and charcoal	..	164	2,288	1,778	7,376	10,968	2,385	24,959
Bamboos	..	..	..	..	5	..	..	5
Other minor produce	..	1,248	2,454	2,195	9,442	11,684	2,326	29,349
Drift and waifwood and confiscated forest produce	..	52	80	26	304	263	4	729
Profits from Government commercial undertakings—								
Miscellaneous—								
Fines and forfeitures	9	59	913	905	593	1,381	..	3,860
Rents of buildings	..	1,100	1,035	1,065	2,206	1,462	11	6,879
Other sources	58	8,736	(*d*) 12,853	10,342	17,454	11,786	6,420	67,649
Recoveries of investments in Government commercial undertakings—								
Mount Stuart Forests	..	..	..	..	..	..	..	..

(*a*) The amount is distributed as follows :—

	RS.			RS.
Coimbatore, North	63,311	The Nilgiris		1,939
Kollegal	1,12,196		Total	1,77,446

(*b*) Excludes Rs. 6,031 credited in the IV Circle. (*c*) Includes Rs. 600 relating to the Nilgiris district.
(*d*) Excludes Rs. 380 credited in the Nilgiri district.

Summary of Revenue of the different districts, 1931–32—*cont.*

Budget heads.	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
FIFTH CIRCLE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
VIII. Forest Receipts—cont.								
Recoveries of indirect charges from Government commercial undertakings—								
Mount Stuart Forests	..	..	..	— 1,993	..	..	..	— 1,993
Total ..	1,40,856	64,469	1,52,660	1,84,177	1,91,801	1,17,622	14,303	8,65,588
Deduct—Refunds—Voted—								
Refunds by forest officers	..	129	8,647	230	950	155	8	10,119
Net Total ..	1,40,856	64,340	1,44,013	1,83,947	1,90,851	1,17,367	14,296	8,55,469

Summary of Revenue of the different districts, 1931-32—*cont.*

Budget heads.	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
SIXTH CIRCLE.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
VIII. Forest Receipts.								
(*a*) Timber and other produce removed from forests by Government Agency—								
Sandalwood		4,806	2,359	..	15,800	..	..	22,965
Other produce—								
Timber		35,066	78,400	1,68,773	13,952	1,39,709	..	4,35,900
Firewood and charcoal		..	..	..	47,242	2	..	47,244
Bamboos		9	..	8	..	1,371	..	1,388
Other minor produce		1	7	12	486	..	..	506
Total	..	35,076	78,407	1,68,793	61,680	1,41,082	..	4,85,038
Total (*a*)	..	39,882	80,766	1,68,793	77,480	1,41,082	..	5,08,003
(*b*) Timber and other produce removed from the forests by consumers or purchasers—								
Forest Department—								
Timber		140	178	226	155	77	..	776
Firewood and charcoal		13,711	2,667	1	5,399	48,673	..	70,451
Bamboos		10	486	940	2,253	15,382	1	19,072
Grazing and fodder grass		5,372	9,938	3,758	5,804	3,164	..	28,036
Other minor produce		4,061	4,000	5,238	3,146	3,054	2,269	21,768
Total, Forest Department	..	23,294	17,269	10,163	16,757	70,350	2,270	1,40,103
Revenue Department—								
Timber		6,292	7,081	1,437	169	2,067	..	17,046
Firewood and charcoal		6,886	1,936	456	251	2,178	..	11,707
Bamboos		4	40	..	10	..	..	54
Other minor produce		1,167	991	266	57	3,351	..	5,832
Total, Revenue Department	..	14,349	10,048	2,159	487	7,596	..	34,639
Total (*b*)	..	37,643	27,317	12,322	17,244	77,946	2,270	1,74,742

Summary of Revenue of the different districts, 1931-32—*cont.*

Budget heads.	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total
SIXTH CIRCLE—*cont.*								
VIII. Forest Receipts—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Drift and waifwood and confiscated forest produce.	..	644	328	83	13	54	..	1,122
Profits from Government commercial undertakings.	..	..	..	..	..	..	1,50,000	1,50,000
Total ..	..	..	..	..	..	..	1,50,000	1,50,000
Miscellaneous—								
Fines and forfeitures	1	87	266	1,639	271	910	1	3,164
Forest College	..	..	..	..	..	..	..	..
Rents of buildings	892	1,910	1,310	3,303	1,648	1,756	575	11,394
Other sources	509	7,949	5,025	9,069	9,136	8,650	947	41,285
Total ..	1,402	9,946	6,590	14,011	11,055	11,316	1,523	55,843
Total ..	1,402	88,115	1,16,001	1,95,209	(a)1,05,792	2,30,398	1,53,793	8,89,710
Deduct—Refunds—Voted—								
Refunds by forest officers	..	357	949	475	395	713	..	2,889
Grand total ..	1,402	87,758	1,14,052	1,94,734	1,05,397	2,29,685	1,53,793	8,86,821

(a) Excludes Rs. 1,939 being sale-proceeds of Sandalwood realized in North Coimbatore division, Fifth Circle.

Summary of Expenditure of the different districts for the year 1931–32.

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total.	Parlakimedi Maliahs.	Golgonda Agency.	Grand total.
FIRST CIRCLE.											
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. *b. Conservancy and Works.*											
A. Forest produce removed by Government agency—Voted—											
Timber	..	..	1,643	1,473	623	..	..	3,739	1,075	1,770	6,584
Firewood and charcoal	..	..	..	63	..	..	..	63	286	..	349
Bamboos	..	..	..	..	..	..	..	..	..	..	..
Sandalwood	..	..	..	..	..	..	..	..	..	..	..
Grass and other minor produce.	..	..	..	..	160	..	7,712	7,872	68	..	7,940
B. Timber and other produce removed from the forest by consumers and purchasers	..	7,715	2,964	6,809	10,826	11,829	6,027	46,170	2,163	568	48,901
C. 1. Feed and upkeep of cattle	..	..	..	— 53	512	..	5	464	..	..	464
2. Renewals or replacements of stores, tools and plant—Voted.	..	227	94	723	5,998	509	1,250	8,801	35	..	8,836
D. 1. Roads and bridges	..	2,771	1,116	424	1,314	1,103	907	7,635	..	..	7,635
2. Buildings—											
Non-voted—											
Rates and taxes	..	153	78	..	331	131	11	704	..	..	704
Voted—											
Buildings	..	6,210	1,082	2,814	2,500	632	1,818	15,056	270	201	15,527
Forest College	..	..	..	..	..	..	..	..	..	..	..
Other works	..	154	..	46	46	110	54	410	..	..	410
E. 1. Regeneration	..	269	..	209	2,571	810	122	128	4,109	199	308	4,616
2. Fire protection	..	..	4,533	226	3,329	1,661	..	242	9,991	403	69	10,463
3. Other works—											
Voted—											
Maintenance of boundaries.	..	966	..	184	1,488	..	51	2,689	4	351	3,044
Forest surveys	..	..	..	..	..	..	..	..	..	..	..
Other items	..	3,700	354	..	190	420	9	4,673	..	20	4,693

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total.	Parlakimedi Maliahs.	Golgonda Agency.	Grand total.
FIRST CIRCLE—*cont.*											
8. *b. Conservancy and Works*—cont.											
F. Other charges—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Non-voted—											
Rates and Taxes	..	..	3	..	22	..	..	25	..	..	25
Voted—											
Grants to Nilgiris Games Association—											
Honoraria	..	..	..	15	11	..	20	46	..	..	46
Supplies and services ..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	550	32	3,742	4	..	4,328	..	..	4,328
H. Suspense—Works Advances ..	..	— 40	..	..	..	..	..	— 40	..	..	— 40
Grand total ..	269	26,389	8,819	18,430	30,324	14,860	18,234	1,16,735	4,503	3,287	1,24,525
Non-Voted ..	..	153	81	..	353	131	11	729	..	..	729
Net total ..	..	26,236	8,238	18,430	29,881	14,729	18,223	1,16,006	4,503	3,287	1,23,796
8. *c. Establishments.*											
A. 1. Pay of officers—											
Non-voted	33,849	15,818	2,947	10,461	11,889	..	10,573	85,537	1,166	..	86,703
Voted	5,993	6,935	7,830	4,171	1,450	8,715	..	35,094	7,926	..	43,020
A. 2. Pay of establishments—Voted—											
Permanent	9,608	52,134	20,416	41,420	42,424	35,026	26,128	2,27,156	15,908	3,637	2,46,701
Temporary	— 152	2,113	873	2,837	1,102	..	..	6,773	1,201	1,056	9,030
A. 3. Allowances—Non-voted—											
Travelling allowances ..	3,046	3,406	566	2,841	2,061	..	1,800	13,720	303	..	14,023
Cost of passage	1,920	..	..	..	..	..	..	1,920	..	..	1,920
Voted—											
Travelling allowances ..	655	6,397	2,957	5,580	5,374	4,659	3,260	28,882	2,791	906	32,573
Fixed travelling allowance ..	..	2,169	882	2,184	2,283	1,674	825	10,017	572	196	10,785
Other compensatory	..	856	373	1,019	671	422	574	3,915	286	132	4,333

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total.	Parlakimedi Maliahs.	Golgonda Agency.	Grand total.
FIRST CIRCLE—*cont.*											
8. *c. Establishments*—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
c. A: 4. Contingencies and supplies and services—											
Non-Voted—											
Rates and taxes	1,645	138	1,020	..	208	548	200	3,759	..	62	3,821
Voted—											
Rents of Public Works Department buildings.	3,344	1,983	2,074	146	1,636	2,978	982	13,143	1,953	324	15,420
Apparatus and materials ..	..	342	76	254	108	92	54	926	58	..	984
Service postage and telegram charges	705	989	537	1,000	283	900	755	5,169	215	39	5,423
Tour charges	387	391	361	558	249	498	544	2,988	407	113	3,508
Office expenses	305	241	151	516	193	159	292	1,902	793	3	2,698
Miscellaneous	11	1,515	180	160	1,953	231	88	4,138	199	62	4,399
Telephone charges ..	..	..	..	..	38	..	..	38	..	..	38
Deduct recoveries on account of Public Works Department Buildings..	— 1,218	— 1,159	— 745	— 38	— 28	— 866	..	— 4,054	— 711	..	— 4,765
Total c. A. District establishments ..	60,143	94,268	40,498	73,109	71,894	55,036	46,075	4,41,023	33,067	6,524	4,80,614
Non-Voted ..	40,460	19,362	4,533	13,302	14,158	548	12,573	1,04,936	1,469	62	1,06,467
Voted ..	19,683	74,906	35,965	59,807	57,736	54,488	33,502	3,36,087	31,598	6,462	3,74,147
52-*A. Capital Outlay on Forests.*											
A. a. Forest surveys	145	150	..	..	..	..	..	295	..	10	305

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total.	Parlakimedi Maliahs.	Golgonda Agency.	Grand total.
FIRST CIRCLE—*cont.*											
52-*A. Capital Outlay on Forests*—cont.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs		Rs.	Rs.
B. Organization, improvements and extension of Forests—Reserved—											
A. Demarcation—Voted—											
Demarcation	..	1,531	..	50	..	..	..	1,581	..	137	1,718
Cost of forest settlement and compensation for land and rights	..	..	..	..	..	..	..	..	..	..	..
B. Sowing and planting	..	..	..	..	2,431	617	1,751	4,799	..	..	4,799
C. Other charges—Voted—											
Working plans	..	..	..	..	..	..	..	..	..	..	..
Other miscellaneous charges	..	..	..	..	..	..	..	..	..	..	..
Total, 52, A.	..	..	..	..	..	..	..	..	..	..	..
C. Communications and buildings—											
A. Roads and bridges—											
Works in progress	..	280	..	927	1,916	..	..	3,123	..	..	3,123
New works	..	2,265	5	20	..	..	5	2,295	..	..	2,295
B. Buildings—											
Works in progress	..	381	15	— 15	534	..	..	915	..	..	915
New works	..	1,750	..	..	..	..	48	1,798	..	84	1,882
C. Other Works—											
Works in progress	..	..	461	..	..	..	..	461	..	..	461
New works	..	..	..	..	..	..	..	..	..	..	..
Total, C.	..	..	..	..	..	..	..	..	..	..	..

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavri, Lower.	Guntur.	Nellore.	Total.	Parlakimedi Maliahs.	Golgonda Agency.	Grand total.
FIRST CIRCLE—*cont.*											
52-*A. Capital Outlay on Forests*—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.
D. Railways and Tramways	..	..	..	..	..	..	..	..	..	..	..
E. Livestock, Stores, tools and plant—											
A. Livestock—Purchase of livestock	..	..	..	..	..	..	45	45	..	..	45
B. Stores, tools and plant ..	..	117	176	259	..	163	..	715	..	16	731
Total, E. ..	..	..	..	..	..	..	..	..	..	..	..
G. Investment in Government commercial undertakings—											
A. Russellkonda Saw Mill ..	..	56,236	..	..	..	..	..	56,236	..	..	56,236
J. *Deduct* English cost of stores ..	..	..	..	..	..	..	..	..	..	..	..
L. Expenditure in England	..	..	..	..	..	..	..	..	..	..	..
Grand Total ..	145	62,710	657	1,241	4,881	780	1,849	72,263	..	247	72,510

Summary of Expenditure of the different districts for the year 1931–32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs
SECOND CIRCLE.								
8. *b. Conservancy, Maintenance and Regeneration.*								
A. Forest produce removed by Government agency—Voted—								
Timber	..	..	1,076	3,875	880	..	1,457	7,288
Other produce—								
1. Firewood and charcoal	..	..	..	..	122	..	..	122
2. Bamboos	..	..	100	..	..	..	..	100
3. Sandalwood	..	196	..	..	..	..	7	203
Total, A	..	196	1,176	3,875	1,002	..	1,464	7,713
B. Timber and other produce removed from the forests by consumers and purchasers.	..	8,028	6,411	6,472	7,248	8,088	11,569	47,816
C. 1. Feed and keep of cattle	..	20	..	..	1,872	..	..	1,892
2. Renewals or replacement of stores and tools and plant.	..	50	39	109	356	36	63	653
Total, C	..	70	39	109	2,228	36	63	2,545
D. 1. Roads and bridges	..	427	1,157	781	2,729	560	1,841	7,495
2. Buildings and other works—								
Non-voted—								
Rates and taxes	..	112	20	280	276	245	88	1,021
Voted—								
Buildings	..	2,068	1,167	1,298	1,694	1,197	1,759	9,183
Other works	..	50	72	193	3	121	..	439
Total, D	..	2,657	2,416	2,552	4,702	2,123	3,688	18,138

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
SECOND CIRCLE—*cont.*		RS.	RS.	RS.	RS.	RS.	RS.	RS.
8. *b. Conservancy, Maintenance and Regeneration*—cont.								
E. 1. Regeneration	..	207	565	78	1,218	472	412	2,952
2. Fire protection	..	179	729	488	1,287	219	810	3,712
3. Other charges—								
Voted—								
Maintenance of boundaries	..	50	127	120	242	25	..	564
Forest surveys	..	..	585	..	..	..	..	585
Other items	..	..	44	..	120	82	73	319
Total, E	..	436	2,050	686	2,867	798	1,295	8,132
F. Other charges—								
Non-voted—								
Rates and taxes	..	..	..	..	..	..	..	..
Voted—								
Non-contract Contingencies—Miscellaneous—(Law charges).	..	..	..	..	..	..	..	..
Honoraria	..	..	82	..	85	50	199	416
Supplies and Services	..	..	242	..	25	25	..	292
Miscellaneous	..	1	9	14	46	23	5	98
Total, F	..	1	333	14	156	98	204	806
H. Suspense—Works Advances—								
Voted	..	..	..	..	..	..	..	..
Total	..	11,388	12,425	13,708	18,203	11,143	18,283	85,150
Non-voted	..	112	20	280	276	245	88	1,021
Voted	..	11,276	12,405	13,428	17,927	10,898	18,195	84,129
Total	..	11,388	12,425	13,708	18,203	11,143	18,283	85,150

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
SECOND CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
A. *District Establishments.*								
A. 1. Pay of officers—Non-voted—								
Pay excluding passage pay	22,235	11,236	2,250	15,656	1,477	8,483	8,770	70,107
Pay of officers—Voted	..	3,600	10,838	900	9,981	..	..	25,319
A. 2. Pay of establishments—Voted—								
Permanent	9,588	33,038	30,203	37,847	46,056	32,420	40,470	2,29,622
Temporary	..	286	852	466	1,551	708	286	4,149
Total of Pay of establishment ..	9,588	33,324	31,055	38,313	47,607	33,128	40,756	2,33,771
A. 3. Allowances—Non-voted—								
Travelling allowance	2,019	2,270	572	2,004	589	1,518	1,577	10,549
Cost of passages granted under the superior Civil Service Rules, 1924.	404	..	..	..	..	..	..	404
Allowances—Voted—								
Travelling allowance	722	3,564	5,310	4,967	6,765	3,999	3,191	28,518
Fixed travelling allowance	..	1,096	1,766	2,234	2,229	1,375	1,839	10,539
Other compensatory	..	611	843	512	1,133	805	1,013	4,917
Total of allowances—Voted ..	722	5,271	7,919	7,713	10,127	6,179	6,043	43,974
Rents of Public Works Department buildings ..	3,474	2,217	..	815	1,050	706	1,959	10,221
Deduct recoveries on account of rents of Public Works Department buildings.	— 1,170	— 560	..	..	— 6	..	— 705	— 2,441
Total of rents ..	2,304	1,657	..	815	1,044	706	1,254	7,780

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Ananta-pur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
SECOND CIRCLE—*cont.*								
A. *District Establishments*—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A. 4. Contingencies and Supplies and Services—								
Non-voted—								
Rates and taxes	795	210	..	127	55	5	785	1,977
Voted—								
Apparatus and materials	..	37	200	143	181	125	139	825
Service postage and telegram charges ..	658	999	788	879	630	789	987	5,730
Tour charges	530	618	831	635	406	602	586	4,208
Office expenses	409	294	933	600	773	537	461	4,007
Miscellaneous	517	282	512	103	417	243	203	2,277
Total of Contingencies ..	2,909	2,440	3,264	2,487	2,462	2,301	3,161	19,024
Total of A. District Establishments ..	40,181	59,798	55,898	67,888	73,287	52,315	61,561	4,10,928
Non-voted ..	25,453	13,716	2,822	17,787	2,121	10,006	11,132	83,037
Voted ..	14,728	46,082	53,076	50,101	71,166	42,309	50,429	3,27,891
52-A. Capital Outlay on Forests.								
(*a*) Communications and buildings—								
A. Roads and bridges—								
Works in progress	..	..	..	..	..	290	..	290
New works	..	..	240	..	1,500	..	400	2,140
B. Buildings—								
Works in progress	..	..	..	..	..	..	..	..
New works	..	..	..	46	..	1,080	173	1,299
Total of 52-A. (*a*) ..	..	..	240	46	1,500	1,370	573	3,729
(*c*) Live-stock, stores, tools and plant—								
A Live-stock—purchase of live-stock	..	..	..	..	..	..	..	..
B. Purchase of stores, tools and plant	..	47	32	47	..	56	28	210
Total of (*c*) ..	..	47	32	47	..	56	28	210
Total ..	..	47	272	93	1,500	1,426	601	3,939

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Working Plans Division.								
		Mount Stuart.	Mangalore.	Lower Godavari.	North Coimbatore.	Wynaad.	Palghat.	Tinnevelly.	Provincial Sylvicultu-rist.	Total.
	Rs.	Rs.							Rs.	Rs.
III (Working Plans) Circle.										
8. *b. Forest Conservancy, Maintenance and Regeneration.*										
b. C. 2. Renewals or replacements of stores, tools and plant—										
Voted—										
Renewals and replacements, tools and plant.	..	..	..	..		..	..	..	160	160
Total ..	..	..	..	..	..	..	..	..	160	160
D. 2. Buildings and other works—										
Voted—										
Buildings	— 36	..	..	..	..	..	..	..	49	13
Total ..	— 36	..	..	..	..	..	..	..	49	13
Voted ..	— 36	209	..	..	..	..	..	..	..	173
Total ..	— 36	209	..	..	..	..	..	..	..	173
8. *c. Forest Establishments.*										
B. Research Establishments.										
C. B. 1. Pay of officers—Non-voted—										
Pay of officers—Voted	..	..	..	..	..	..	..	..	21,266	21,266
Total ..	..	..	..	..	..	..	..	..	21,266	21,266
C. B. 1. Pay of establishments—Voted	..	..	..	..	..	..	..	..	8,383	8,383
C. B. 2. Supplies and Services—Voted—Petty Supplies.	..	..	..	..	..	..	..	..	5,909	5,909
Total ..	..	..	..	..	..	..	..	..	14,292	14,292

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Working Plans Division. Mount Stuart.	Mangalore.	Lower Godavari.	North Coimbatore.	Wynaad.	Palghat.	Tinnevelly.	Provincial Sylvioulturist.	Total.
III (WORKING PLANS) CIRCLE—*cont.*	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. *e. Forest Establishments*—cont.										
C. B. 3. Other charges—Allowances—Non-voted.	..	..	..	..	..	..	..	..	4,207	4,207
Rates and taxes	..	..	..	..	..	..	..	..	93	93
Allowances—Voted	..	..	..	..	..	..	..	..	3,072	3,072
Contingencies	..	..	..	..	..	..	..	..	910	910
Total ..	..	..	..	..	..	..	..	..	8,282	8,282
Non-voted ..	..	..	..	..	..	..	..	..	25,566	25,566
Voted ..	..	..	..	..	..	..	..	..	18,274	18,274
Total ..	..	..	..	..	..	..	..	..	43,840	43,840
52. *A-b. Organization, Improvements and Extension of Forests—Reserved.*										
52. A-B. Stores—										
Purchase of stores and tools and plant ..	1,739	..	..	..	..	..	8	..	..	1,747
Total ..	1,739	..	..	..	..	..	8	..	..	1,747
b. c. Other charges—Voted	3,595	..	410	352	8,237	1,713	4,836	411	..	19,554
Total ..	3,595	..	410	352	8,237	1,713	4,836	411	..	19,554
Grand Total ..	5,334	..	410	352	8,237	1,713	4,844	411	..	21,301
Voted ..	5,334	..	410	352	8,237	1,713	4,844	411	..	21,301

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Working Plans Division.								Total.
		Mount Stuart.	Mangalore.	Lower Godavari.	North Coimbatore.	Wynaad.	Palghat.	Tinnevelly.	Provincial Sylviculturist.	
III (Working Plans) Circle—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
52-A. f. Capital Outlay on Forests.										
f. A. Pay of officers—Non-voted	25,202	950	6,480	865	9,275	9,294	..	2,656	..	54,722
f. B. Pay of officers—Voted	9,751	..	3,918	5,731	957	..	6,323	2,257	..	28,937
Pay of establishments—Voted	10,244	542	3,196	5,531	23,784	6,981	8,300	1,453	21	60,052
f. C. Other charges—Non-voted—										
Allowances—Non-voted—										
Travelling (including cost of passage) ..	5,739	..	591	580	2,589	1,801	..	875	..	12,175
Allowances—Voted—										
1. Travelling allowance	3,787	..	1,620	2,736	7,094	2,054	2,901	889	..	21,081*
2. Fixed travelling allowance	653	105	137	230	3,445	699	1,319	80	9	6,677
3. Other compensatory	1,483	154	521	227	1,028	385	139	76	6	4,019
Contingencies—Voted	3,203	..	170	422	433	407	257	290	..	5,092
Supplies and Services	1,425	..	..	..	42	9	135	..	..	1,611
Non-voted ..	30,941	950	7,071	1,445	11,864	11,095	..	3,531	..	66,897
Voted ..	30,546	801	9,562	14,877	36,783	10,535	19,374	4,955	36	1,27,469
Grand Total ..	66,721	1,751	17,043	16,674	56,884	23,343	24,218	8,897	36	2,16,667

* The audited actuals under the head are Rs. 20,885 and 6,873 respectively.

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Chittoor.	Vellore.	North Salem.	Central Salem.	South Salem.	Total.
FOURTH CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
8. *b. Forest Conservancy, Maintenance and Regeneration.*							
b. A. Forest produce removed by Government Agency—							
Timber	..	789	54	445	..	..	1,288
Sandalwood	..	203	6,360	6,173	2,859	2,327	17,922
Grass and other minor produce	..	..	50	..	..	..	50
Total ..	..	992	6,464	6,618	2,859	2,327	19,260
b. B. Timber and other produce removed from forests by consumers and purchasers.	..	10,023	11,527	6,234	9,797	6,258	43,839
b. C. 1. Feed and up-keep of cattle	..	52	..	..	..	..	52
2. Renewals and replacement of stores and tools and plant	..	95	86	100	164	134	579
Total ..	..	147	86	100	164	134	631
b. D. 1. Roads and bridges	..	3,315	4,049	3,323	343	1,563	12,593
2. Buildings and other works—							
Rates and taxes—Non-voted	..	244	739	45	116	137	1,281
Buildings—Voted	..	3,697	3,827	1,098	3,658	2,377	14,657
Other works -Voted	..	525	57	16	64	90	752
Total ..	..	7,781	8,672	4,482	4,181	4,167	29,283
b. E. 1. Regeneration	..	2,750	728	1,219	1,137	672	6,506
2. Fire protection	..	420	1,659	465	1,353	1,143	5,040
3. Other works—Maintenance of boundaries— Voted	..	100	30	49	129	..	308
Total ..	..	3,270	2,417	1,733	2,619	1,815	11,854

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Chittoor.	Vellore.	North Salem.	Central Salem.	South Salem.	Total.
FOURTH CIRCLE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. *b. Forest Conservancy, Maintenance and Regeneration*—cont.							
b. Other items—							
F. Other charges—							
Non-voted—Rates and taxes	..	..	..	..	..	..	..
Voted—Honoraria	..	20	50	13	55	405	543
Supplies and Services	..	..	..	3,298	2	190	3,490
Miscellaneous	..	..	2	48		6	56
b. H. Suspense works and advances	..	..	..	..	— 171	..	— 171
Grand Total—8. *b.* Conservancy, maintenance and regeneration ..	..	22,233	29,218	22,526	19,506	15,302	1,08,785
Non-voted ..	..	244	739	45	116	137	1,281
Voted ..	..	21,989	28,479	22,481	19,390	15,165	1,07,504
8. *c. Establishments.*							
A-1. Pay of officers—Non-voted	24,937	14,299	11,479	12,221	10,912	2,160	76,008
Pay of Officers—Voted	..	..	8,849	5,264	..	6,782	20,895
A-2. Pay of establishments—Voted—							
1. Permanent	10,320	40,131	56,855	39,841	43,288	28,959	2,19,394
2. Temporary	5	765	2,264	2,975	948	1,452	8,409
Total ..	10,325	40,896	67,968	48,080	44,236	37,193	2,48,698
Cost of passages granted under the superior services rules.	4,427	..	..	4,222	376	..	9,025
A-3. Allowances—Non-voted—							
Travelling allowance	1,760	1,937	2,007	2,067	2,102	710	10,583

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Chittoor.	Vellore.	North Salem.	Central Salem.	South Salem.	Total.
FOURTH CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.
8. *c. Establishments*—cont.							
Allowances—Voted—							
1. Travelling allowance	544	3,638	4,504	6,179	3,753	4,625	23,243
2. Fixed travelling allowance	..	1,824	2,944	1,985	1,683	1,504	9,940
3. Other Compensatory	..	488	533	871	585	503	2,980
Total ..	544	5,950	7,981	9,035	6,021	6,632	36,163
Rents of Public Works Department buildings ..	7,803	300	3,453	1,586	2,805	1,783	17,730
Deduct recoveries on account of rent of Public Works Department buildings.	— 2,529	..	— 557	— 814	— 946	— 779	— 5,625
C.A. 4. Contingencies and supplies and services—							
Rates and taxes—Non-voted	..	22	346		52	61	481
Apparatus and materials	33	299	139	149	124	109	853
Service postage and telegram charges	522	795	1,785	1,217	912	898	6,129
Tour charges	183	636	509	640	330	555	2,853
Office expenses	452	221	578	571	773	307	2,902
Miscellaneous	391	133	70	181	354	350	1,479
Total ..	48,848	65,488	95,758	79,155	68,051	49,979	4,07,279
Non-voted ..	31,124	16,258	13,832	18,510	13,442	2,931	96,097
Voted ..	17,724	49,230	81,926	60,645	54,609	47,048	3,11,182
8. *c. ii—Research.*							
Charges payable to Governments, Departments and others.	..	..	..	20,124	..	..	20,124
Total ..	..	..	..	20,124	..	..	20,124

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Chittoor.	Vellore.	North Salem.	Central Salem.	South Salem.	Total.
FOURTH CIRCLE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
52. A-b.—Conservancy and Works.							
(*a*) Forest surveys	..	..	..	..	620	..	620
(*b*) Organization, improvement and extension of forests—							
Demarcation	..	123	..	30	290	45	488
Cost of forest settlement and compensation for land and rights	..	..	76	..	..	..	76
Other works	..	..	52	..	..	..	52
(*c*) Communications and buildings—							
Works—Voted—							
Roads and bridges—							
Works in progress	..	..	703	452	41	..	1,196
New works	..	268	..	..	..	196	464
Buildings—							
Works in progress	..	..	1,614	..	..	..	1,614
New works	..	..	57	345	..	12	414
Other works—							
Works in progress	..	..	..	..	..	..	..
New works	..	..	195	..	..	..	195
Total ..	..	268	2,569	797	41	208	3,883
(*e*) Purchase of stores, tools and plant	..	137	100	26	16	11	290
Grand Total ..	..	528	2,797	853	967	264	5,409

Summary of Expenditure of the different districts for the year 1931–32—*cont.*

Budget heads.	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
FIFTH CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
8. *b. Conservancy, Maintenance and Regeneration.*								
A. Forest produce removed by Government agency—Voted.	..	..	..	..	..	..	2	73,032
Timber	..	..	207	69,161	591	3,071	..	..
Firewood and charcoal	..	..	..	..	..	..	..	..
Bamboos	..	..	..	..	..	..	..	..
Sandalwood	490	6,634	11,972	..	..	725	..	19,821
Grass and other minor produce ..	..	181	222	..	..	..	..	403
C.B. Timber and other produce removed from the forest by consumers and purchasers.	..	8,656	10,839	2,890	12,877	6,909	250	42,421
C.C. 1. Feed and keep of cattle	..	..	..	5,285	..	..	..	5,285
2. Renewals and replacements of stores, tools and plant.	..	24	156	494	60	230	7	971
C.D. 1. Roads and bridges	..	3,488	8,400	4,959	9,542	3,741	..	30,130
2. Buildings—Non-voted	..	..	..	..	..	..	..	..
Rates and taxes	..	48	13	61	12	81	..	215
Voted—Buildings	..	1,128	1,865	3,070	2,658	2,583	213	11,517
Other works	..	41	33	49	125	21	..	269
C.E. 1. Regeneration	..	5	90	13,266	692	248	20	14,321
2. Fire protection	..	590	1,525	1,767	3,382	389	..	7,653
3. Other charges	..	..	..	..	..	..	..	..
Maintenance of boundaries	..	11	67	124	82	61	10	355
Other items	..	247	628	397	252	167	..	1,691
C.F. Other charges—Non-voted	..	..	..	..	..	..	..	..
Rates and taxes	..	38	..	..	66	..	..	104
C.G. Honoraria—Voted	..	..	14	..	..	..	..	14
Supplies and services	..	..	..	..	..	8	..	8
Miscellaneous	..	..	7	5,105	..	72	11	5,195
H. Suspense Works Advances	..	..	..	— 89	..	— 72	..	— 161
Total ..	490	21,091	36,038	1,06,539	30,339	18,234	513	2,13,244

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Budget heads.	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
FIFTH CIRCLE—*cont.*								
8. *C. A. District Establishments.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
C.A. 1. Pay of officers—Non-voted	25,074	12,203	13,283	21,033	4,050	8,083	..	83,726
Pay of officers—Voted	7,498	550	4,895	5,904	13,266	..	..	32,113
C.A. 2. Pay of establishments—Voted—								
Permanent	9,591	35,273	39,982	32,036	48,167	35,836	1,009	2,01,894
Temporary	144	318	812	1,865	493	573	..	4,205
C.A. 3. Allowances—								
Non-voted—Travelling allowances ..	3,778	2,392	2,888	3,822	817	2,046	..	15,743
Cost of passages	..	..	..	† 23	..	..	..	23
Voted—Travelling allowance	1,735	3,801	5,476	4,660	7,245	3,372	30	26,319
Fixed travelling allowance	..	1,892	2,457	1,375	2,440	910	114	9,188
Other compensatory	..	498	656	448	1,732	268	..	3,602
C.A 4. Contingencies and supplies and services—						..	..	..
Non-voted—Rates and taxes	575	..	781	611	382	..	..	..
Voted—(*a*) Rents on Public Works Department buildings ..	1,164	2,014	2,594	2,017	724	98	..	2,447
(*b*) *Dduct* recoveries on account of Public Works Department buildings ..	..	— 718	— 819	— 937	..	1,401	..	9,914
Apparatus and materials	..	87	214	413	18	— 708	..	— 3,182
Service Postage and telegram charges.	521	490	643	996	1,194	12	..	744
Tour charges	261	372	638	199	340	890	100	4,834
Office expenses	636	726	580	658	958	623	..	2,433
Miscellaneous	217	171	33	75	215	325	..	3,878
Total ..	51,194	60,069	75,113	75,193	82,041	53,914	1,253	3,98,777
52*A. Capital Outlay on Forests.*						185	..	896
C. Organization, improvements and extension of forests—								
A. Demarcation	..	..	..	..	274	..	3	277
B. Sowing and planting	..	..	..	..	..	1,006	..	1,006
b.C. Other charges—								
Other Miscellaneous charges	..	..	..	..	— 20	..	..	— 20

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Budget heads.	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
FIFTH CIRCLE—*cont.*								
52-A. Capital Outlay on Forests—cont.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
c.C. Communications and buildings—								
A. Roads and bridges—								
Works in progress	..	..	..	..	..	..	..	..
New works	..	100	..	30	93	56	..	279
B. Buildings—								
Works in progress	..	1,777	..	— 154	— 62	..	..	1,561
New works	..	..	4,152	5,381	62	..	..	9,595
C. Other works—								
Works in progress	..	..	..	..	..	..	..	..
New works	..	..	..	..	..	..	..	..
e.A. Purchase of live-stock	..	..	..	2,685	..	..	..	2,685
B. Purchase of stores, tools and plant	..	47	197	7	140	143	..	534
G. Investments in Government Commercial undertakings	..	..	..	..	..	..	..	..
Mount Stuart Forests	..	..	..	— 20,050	..	..	..	— 20,050
K. *Deduct*—Receipts and recoveries on capital accounts	..	..	..	— 2,550	..	..	..	— 2,550
Total	..	1,924	4,349	— 14,651	487	1,205	3	— 6,683

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
SIXTH CIRCLE.								
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.
8. *b. Conservancy, Maintenance and Regeneration.*								
A. Forest produce removed by Government Agency—Voted—								
Timber	..	15,053	45,415	65,265	949	75,422	..	2,02,104
Firewood and charcoal	..	..	..	..	10,263	..	..	10,263
Bamboos	..	..	..	3	..	1,260	..	1,263
Sandalwood	..	704	384	..	1,852	..	..	2,940
Grass and other minor produce ..	..	..	..	4	507	..	..	511
Total A ..	..	15,757	45,799	65,272	13,571	76,682	..	2,17,081
B. Timber and other produce removed from the forest by consumers and purchasers	..	1,334	1,351	2,166	654	5,509	306	11,320
C. (1) Feed and keep of cattle	323	4,480	9,486	30,075	5,238	2,281	..	51,883
(2) Renewals and replacement of stores, tools and plant—Voted—Renewals and replacements—Tools and plant	..	375	1,020	2,939	361	119	18	4,832
D. (1) Roads and bridges	..	593	2,544	34,791	3,289	3,758	588	45,563
D. (2) Buildings and other works—								
Non-voted—Rates and taxes ..	..	..	143	..	967	83	..	1,193
Buildings	259	814	1,066	4,360	2,207	3,743	1,306	13,755
Forest College	..	..	..	..	..	..	..	..
Other works	..	12	97	755	99	71	11	1,045
Total D (2) ..	259	826	1,306	5,115	3,273	3,897	1,317	15,993
E. (1) Regeneration	..	1,401	2,214	10,783	3,993	5,879	16,684	40,954
(2) Fire protection	..	751	764	1,485	2,514	2,423	814	8,751

Summary of Expenditure of the different districts for the year 1931–32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
SIXTH CIRCLE—*cont.*								
8. *b. Conservancy, Maintenance and Regeneration*—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
E. (3) Other works—Voted—								
Maintenance of boundaries ..	..	..	20	366	1,039	128	..	1,553
Forest surveys	..	..	9	..	..	..	..	9
Other items	..	12	39	3	399	255	206	914
Total E. (3) ..	..	12	68	369	1,438	383	206	2,476
F. Other charges—								
Non-voted—Rates and taxes	..	..	..	69	1,447	52	..	1,568
Grants-in-aid—Miscellaneous — Recurring—Nilgiris Games Association.	..	..	..	..	4,671	..	..	4,671
Honoraria	..	69	..	..	..	..	..	69
Supplies and Services	..	79	23	1,109	1	5	..	1,217
Miscellaneous	..	60	126	15	10	10	..	221
Total F ..	..	208	149	1,193	6,129	67	..	7,746
ix. Suspense—Works Advances—Voted ..	..	..	..	— 149	..	— 135	..	— 284
Total ..	582	25,737	64,701	1,54,039	40,460	1,00,863	19,933	4,06,315
Non-voted ..	..	..	143	69	2,414	135	..	2,761
Voted ..	582	25,737	64,558	1,53,970	38,046	1,00,728	19,933	4,03,554
8. *c. A. District Establishments.*								
A. (1) Pay of Officers—								
Non-voted	27,403	7,574	5,128	19,345	12,053	2,282	8,527	82,312
Voted	5,384	1,125	9,446	15,771	1,080	13,715	6,865	53,386
Total A (1) ..	32,787	8,699	14,574	35,116	13,133	15,997	15,392	1,35,698
A. (2) Pay of Establishments—Voted—								
Permanent	10,931	35,205	34,543	49,110	41,426	32,439	19,012	2,22,666
Temporary	60	451	1,343	1,947	346	1,028	2,635	7,810
Total A. (2) ..	10,991	35,656	35,886	51,057	41,772	33,467	21,647	2,30,476

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
SIXTH CIRCLE—*cont.*								
8. *c. A. District Establishments* —cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A. (3) Allowances—Non-voted—								
Travelling allowance	3,036	2,128	2,037	4,892	2,131	722	1,461	16,407
Cost of passage	1,861	..	..	..	..	..	..	1,861
Allowances—Voted—								
Travelling allowance	3,206	3,109	7,529	9,283	5,247	5,997	2,203	36,574
Fixed travelling allowance ..	..	2,266	1,993	2,942	1,974	1,675	1,159	12,009
Other compensatory	1,541	299	572	432	4,762	364	309	8,279
Total A. (3) ..	9,644	7,802	12,131	17,549	14,114	8,758	5,132	75,130
A. (4) Contingencies—Supplies and services—								
Non-voted—								
Rates and taxes	151	56	60	..	309	32	..	608
Voted—								
Rents of Public Works Department buildings	1,026	369	562	1,054	4,641	842	..	8,494
Apparatus and materials ..	..	51	114	148	195	122	50	680
Service postage and telegrams ..	834	872	1,100	1,301	489	710	177	5,483
Tour charges	802	256	419	239	323	165	1	2,205
Office expenses	239	88	27	460	476	540	42	1,872
Miscellaneous	84	216	272	530	138	177	257	1,674
Deduct—Recoveries on account of Public Works Department buildings	..	..	..	— 142	— 487	..	..	— 629
Total A. (4) ..	3,136	1,908	2,554	3,590	6,084	2,588	527	20,387
Total ..	56,558	54,065	65,145	1,07,312	75,103	60,810	42,698	4,61,691
Non-voted ..	32,451	9,758	7,225	24,237	14,493	3,036	9,988	1,01,188
Voted ..	24,107	44,307	57,920	83,075	60,610	57,774	32,710	3,60,503

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
SIXTH CIRCLE—*cont.*								
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
52. A.—Capital Outlay on Forests.								
52. A—*b.* Organization, improvement and extension of forests—Voted—								
b. A. Demarcation—Voted—								
Demarcation	..	..	..	118	..	..	..	118
Cost of Forest Settlement, etc.	..	..	..	..	..	..	..	..
Total *b.* A. ..	..	..	..	118	..	..	..	118
b. C. Other charges—Voted—								
Working plans ..	..	..	..	884	1,591	..	..	2,475
Other miscellaneous charges	..	..	..	..	..	..	..	..
Total *b.* C. ..	..	..	..	884	1,591	..	..	2,475
Total 52. A.—*b.* ..	..	..	..	1,002	1,591	..	..	2,593
52. A—*c.* Communication and buildings—								
c. A. Roads and bridges—								
Works in progress ..	..	..	108	2,187	..	39	225	2,559
New works	..	— 58	551	..	..	2,409	..	2,902
B. Buildings—								
Works in progress ..	..	..	..	— 111	— 130	..	878	637
New works	25	— 2	..	..	82	10,305	158	10,568
C. Other works—								
Works in progress ..	..	278	7	174	..	292	..	751
New works	..	..	930	118	..	964	..	2,012
Total 52. A—*c.* ..	25	218	1,596	2,368	— 48	14,009	1,261	19,429

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
SIXTH CIRCLE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
52. *A.—Capital Outlay on Forests*—cont.								
52. A—*e.* Livestock, stores, tools and plant—								
e. A. Purchase of livestock ..	..	..	..	2,022	2,005	218	237	4,482
B. Purchase of stores, tools and plant	..	26	108	804	67	1,048	..	2,053
Total 52. A—*e.* ..	..	26	108	2,826	2,072	1,266	237	6,535
52. A—*g.* Investments in Government commercial undertakings—								
e. C. Nilambur Valley Forests.	1,360	..	..	..	..	..	225	1,585
Total 52. A—*g.* ..	1,360	..	..	..	..	..	225	1,585
Grand Total 52. A. ..	1,386	244	1,704	6,196	3,616	15,275	1,723	30,142

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

8. *a. Forest—General Direction.*

	Actuals, 1931-32.
	Rs.
A. Pay of officers—Non-voted	42,077
B. Pay of establishments—Voted	25,822
C. Clothing and equipment	27,264
D. Charges payable to Governments, departments and others	18,554
E. Other charges—	
Non-voted—	
Travelling allowance (including cost of passages)	4,612
Other compensatory	1,446
Rates and taxes	344
Voted—	
Allowances	1,146
Rents	3,522
Books and periodicals	2,059
Service postage and telegram charges ...	1,799
Other charges	2,205
Total ...	1,30,850

8. *c. B. Research.*

	Actuals, 1931-32.
	Rs.
1. Pay of officers—Non-voted	21,266
Pay of establishments—Voted	8,382
2. Supplies and services—Voted—Petty supplies ...	5,918
3. Other charges—	
Non-voted—	
Allowances	4,207
Rates and taxes	93
Voted—	
Allowances	3,072
Contingencies	901
Charges payable to Governments, departments and others—Subsidy to the Indian Institute of Science	9,829
Contribution payable to the Government of India for entomological investigation of spike disease in sandalwood	10,295
Total ...	63,963

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

8. *c. C. Exploitation.*

	Actuals, 1931-32.		
	VI Circle.	Forest Engineer.	Forest Utilization officer.
	Rs.	Rs.	Rs.
1. Pay of officers—			
Non-voted	..	11,010	18,640
Voted	..	839	..
2. Pay of establishments—Voted—			
Permanent	..	5,806	2,452
Temporary	385	1,528	5,643
3. Allowances—			
Non-voted—			
Travelling allowances (including cost of passages)	— 446	2,705	7,560
Other compensatory	..	..	3,588
Travelling allowances	..	1,695	1,284
Fixed travelling allowances ..	..	323	..
Other compensatory	..	177	63
4. Other charges—			
Non-voted—			
Rates and taxes	..	..	130
Voted—			
Rents of Public Works Department buildings	..	2,906	1,399
Other contingencies	..	674	1,165
Apparatus and materials	..	66	..
Other charges	..	118	..
Deduct recoveries, etc.	..	— 969	..
Total ..	— 61	26,878	41,924

Summary of Expenditure of the different districts for the year 1931-32—*cont.*

8. *c. D. Forest College.*

	Actuals, 1931-32. Rs.
1. Pay of officers—	
Non-voted	...
Voted	20,148
2. Pay of establishments—Voted	17,041
3. Other charges	13,071
Travelling allowances including cost of passages.	1,924
Rates and taxes	19
Voted—	
Travelling allowances	2,760
Fees to Examiners	865
Pay of menials	2,046
Apparatus and materials	2,502
Horti and Agri operations	2,111
Other petty supplies and contingencies ...	5,279
Total ...	67,766

8. *c. E. Chenchu Officer.*

	Actuals, 1931-32. Rs.
Pay of establishments—Voted—	
Temporary	15,773
Voted—Travelling and other allowances	1,757
Contingencies	1,127
Supplies and services	6,721
Total ...	25,378

ANNUAL FORM No. 39.

Summary of Revenue and Expenditure for 1931-32.

ANNUAL

Summary of Revenue and

Budget heads.	First Circle.	Second Circle.	Third Circle.	Fourth Circle.	Fifth Circle.	Sixth Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
VIII. FOREST—RECEIPTS.						
(a) Timber and other produce removed from the forests by Government Agency—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Sandalwood	35	..	..	2,58,839	1,77,446	22,965
Other produce—						
Timber	37,058	23,459	14	3,213	1,02,626	4,35,900
Firewood and charcoal.	3,676	762	..	1,724	1,077	47,244
Bamboos	78	228	..	40	..	1,388
Other minor produce ..	10,323	7	..	262	2,844	506
Total ..	51,135	24,456	14	5,239	1,06,547	4,85,038
Total (a) ..	51,170	24,456	14	2,64,078	2,83,993	5,08,003
(b) Timber and other produce removed from the forests by consumers or purchasers—						
Forest Department—						
Timber	16,283	27,485	..	1,862	50,184	776
Firewood and charcoal. ..	1,72,896	1,02,781	..	62,804	1,88,445	70,451
Bamboos	94,374	58,673	...	1,21,844	35,461	19,072
Grazing and fodder grass	1,01,754	1,51,410	..	1,62,830	1,13,131	28,036
Other minor produce ..	42,652	30,828	..	35,875	49,769	21,768
Total, Forest Department ..	4,27,959	3,71,177	..	3,85,215	4,36,990	1,40,103
Revenue Department—						
Timber	15,749	15,173	..	40,693	13,168	17,046
Firewood and charcoal.	12,212	7,596	..	25,378	24,959	11,707
Bamboos	133	8	..	23	5	54
Other minor produce ..	38,413	2,41,354	..	74,525	29,349	5,832
Total, Revenue Department ..	66,507	2,64,131	..	1,40,619	67,481	34,639
Total (b) ..	4,94,466	6,35,308	..	5,25,834	5,04,471	1,74,742
(c) Drift and waif wood and confiscated forest produce.	4,243	2,594	..	636	729	1,122
(d) Profits from Government commercial undertakings—						
Nilambur Valley Forests.	..	..	..	..	..	1,50,000
Mount Stuart Forests ..	..	..	..	..	— 1,993	..
(e) Recoveries of indirect charges from Government commercial undertakings—						
Mount Stuart Forests ..	..	..	..	..	..	..
Nilambur Valley Forests.	..	..	..	..	..	..
Total (e) ..	..	..	..	..	..	..

(c) Represents March supplemental adjustments.

FORM No. 39.

Expenditure for 1931–32.

Forest Utilization Officer. (8)	Forest Engineer. (9)	Parlakimedi Maliahs. (10)	Golgonda Agency. (11)	Forest College. (12)	Provincial Sylvioulturist. (13)	Chenchu officer. (14)	Chief Conservator. (15)	Total. 1931-32. (16)	Total. 1930-31. (17)
	Rs.	Rs.	Rs.					Rs.	Rs.
..	..	..	..	..	..	..	..	4,59,285	4,37,342
..	120	3,157	3,043	..	..	..	..	6,08,690	10,23,036
								(c)+61,106	
..	..	2,148	..	..	..	..	..	56,631	40,672
								(c) + 550	
..	..	..	..	..	..	..	..	1,734	796
..	..	208	..	..	..	..	..	14,150	13,111
..	120	5,513	3,043	..	..	..	..	6,81,105	10,77,615
..	120	5,513	3,043	..	..	..	..	11,40,390	15,14,957
..	..	6,521	752	..	..	..	..	1,04,163	63,456
..	..	5,553	..	..	..	..	..	6,02,930	7,71,206
..	..	4,022	130	..	..	..	..	3,33,576	3,79,154
								(c)+ 1,848	
..	..	1,358	281	..	..	..	..	5,58,800	5,93,408
..	..	13,609	700	..	..	..	..	1,95,001	2,67,344
								(c)+2,069	
..	..	31,063	1,863	..	..	..	..	17,94,470	20,74,568
..	..	..	..	..	..	..	..	1,01,839	1,50,628
..	..	..	..	..	..	..	..	81,552	1,14,288
..	..	..	..	..	..	..	..	223	207
..	..	..	..	..	..	..	..	3,89,473	3,65,414
..	..	..	..	..	..	..	..	5,73,387	6,30,537
..	..	31,063	1,863	..	..	..	..	23,70,116	27,05,105
..	..	57	1	..	..	..	..	9,382	10,781
..	..	..	..	..	..	..	..	1,50,000	3,06,698
								(c)+93,077	
..	..	..	..	..	..	..	..	— 1,993	38,463
								(c)+17,127	
									3,45,161
..	..	..	..	..	..	..	..	(c)+15,131	48,535
..	..	..	..	..	..	..	..	(c)+20,038	..
..	..	..	..	..	..	..	..	(c)+35,169	48,535

Summary of Revenue and

Budget heads.	First Circle.	Second Circle.	Third Circle.	Fourth Circle.	Fifth Circle.	Sixth Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
VIII. FOREST—RECEIPTS—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(*g*) Miscellaneous—						
Fines and forfeitures ..	4,086	8,648	5	5,002	3,860	3,164
Forest College	..	..	..	..	..	..
Rents of buildings ..	6,475	9,595	622	7,615	6,879	11,394
Other sources	38,525	53,763	197	65,440	67,649	41,285
Total (*g*) ..	49,086	72,006	824	78,057	78,388	55,843
Grand Total ..	5,98,965	7,34,364	838	8,68,605	8,65,588	8,89,710
Deduct — Refunds — Voted—Refunds by forest officers.	4,133	2,516	..	15,416	10,119	2,889
Net Total ..	5,94,832	7,31,848	838	8,53,189	8,55,469	8,86,821
Added or deducted with reference to Accountant-General's actuals.	+ 2,501	+ 219	— 49		— 189	+ 48
	5,97,333	7,32,067	789	8,53,189	8,55,280	8,86,869
EXPENDITURE.						
8. (*b*) *Forest Conservancy, Maintenance and Regeneration.*						
I. Forest produce removed by Government agency—						
Voted—						
Timber	3,739	7,288	..	1,288	73,032	2,02,104
Firewood and charcoal.	63	122	..	..	..	10,263
Bamboos	..	100	..	..	..	1,263
Sandalwood	..	203	..	17,922	19,821	2,940
Grass and other minor produce.	7,872	..	..	50	403	511
Total I ..	11,674	7,713	..	19,260	93,256	2,17,081

(*c*) Represents March supplemental adjustments.

Expenditure for 1931–32—*cont.*

Forest Utilization Officer. (8)	Forest Engineer. (9)	Parlakimedi Maliahs. (10)	Golgonda Agency. (11)	Forest College. (12)	Provincial Sylviculturist. (13)	Chenchu officer. (14)	Chief Conservator. (15)	Total. 1931-32. (16)	Total. 1930-31. (17)
Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.
..	..	132	..	..	..	..	..	24,897 (c) + 45	18,524
..	..	..	..	55,794	..	..	..	55,794	54,689
30	..	187	80	1,162	..	..	..	44,039 (c)+8,641	52,617
130	2,359	981	58	101	..	..	3,116	2,74,504 (c)+4,146	3,57,005
160	2,359	1,300	138	57,057	..	..	3,116	3,99,234	4,82,835
160	2,479	37,933	5,045	57,057	..	..	3,116	40,66,262 (c)+2,23,778	51,07,374
233	7	81	1	..	..	..	..	35,395	89,476
— 73	2,472	37,852	5,044	57,057	..	..	3,116	40,28,465	50,17,898
+ 100	+ 1	..	..	..	..	..	..	+ 2,631 (c)+2,23,778	.. — 94
27	2,473	37,852	5,044	57,057	..	..	3,116	42,54,874	50,17,804

3,042	899	1,075	1,770	..	..	..	..	2,94,237	5,35,697
..	..	286	..	..	..	..	..	10,734	20,393
..	..	..	..	..	..	..	..	1,363	782
65	..	..	..	..	..	..	..	40,951	77,985
24	..	68	..	..	..	..	..	8,928	13,568
3,131	899	1,429	1,770	..	..	..	..	3,56,213	6,48,425

Summary of Revenue and

Budget heads.	First Circle.	Second Circle.	Third Circle.	Fourth Circle	Fifth Circle.	Sixth Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
EXPENDITURE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. *b. Conservancy, Maintenance and Regeneration*—cont.	..	..				..
II. Timber and other produce removed from the Forest by consumers and purchasers.	46,170	47,816	..	43,839	42,421	11,320
III. 1. Feed and upkeep of cattle.	464	1,892	..	52	5,285	51,883
2. Renewals or replacements of stores, tools and plant—Voted—	..	..	..	..	..	..
Renewals and replacements—Tools and plant.	8,801	653	160	579	971	4,832
IV. 1. Roads and bridges ..	7,635	7,495	..	12,593	30,130	45,563
2. Buildings and other works—	..	..	..	..	..	..
Non-voted—						
Rates and taxes ..	704	1,021	..	1,281	215	1,193
Voted—						
Buildings ..	15,056	9,183	13	14,657	11,517	13,755
Forest college ..	..	..	..	..	..	..
Other works ..	410	439	..	752	269	1,045
Total IV ..	23,805	18,138	13	29,283	42,131	61,556
V. 1. Regeneration	4,109	2,952	..	6,506	14,321	40,954
2. Fire protection	9,991	3,712	..	5,040	7,653	8,751
3. Other works	..	..	..	..	..	..
Voted—						
Maintenance of boundaries.	2,689	564	..	308	355	1,553
Forest surveys ..	..	585	..	..	..	9
Other items	4,673	319	..	..	1,691	914
Total V ..	21,462	8,132	..	11,854	24,020	52,181
VI. Other charges—						
Non-voted—						
Rates and taxes	25	..	..	..	104	1,568
Voted—						
Grants to Nilgiris Games Association.	..	..	..	..	..	4,671
Honoraria	46	416	..	543	14	69
Supplies and services ..	..	292	..	3,490	8	1,217
Miscellaneous	4,328	98	..	56	5,195	221
Total VI ..	4,399	806	..	4,089	5,661	7,746
VII. Suspense—Works advances.	— 40	..	..	—171	—161	—284
Grand Total ..	1,16,735 (*a*) + 2	85,150 (*a*) + 1	173 (*a*)—129	1,08,785 (*a*) —2	2,13,244 (*a*) —352	4,06,315 (*a*) + 55

(*a*) Added or deducted with reference to Accountant-General's actuals.

Expenditure for 1931–32—*cont.*

Forest Engineer. (8)	Forest Utilization Officer. (9)	Parlakimedi Maliahs. (10)	Golgonda Agency. (11)	Forest College. (12)	Provincial Sylviculturist. (13)	Chenchu officer. (14)	Chief Conservator. (15)	Total. 1931–32. (16)	Total. 1930–31. (17)
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
..	..	2,163	568	..	..	..	..	1,94,297	2,07,666
..	..	..	..	..	..	..	..	59,576	89,701
..	..	..	..	..	..	..	..	..	..
— 399	24	35	..	..	..	..	9,022	24,678	15,604
2	..	..	..	..	..	..	..	1,03,418	89,190
..	..	..	..	105	..	..	..	4,519	3,125
..	..	270	201	4,800	..	385	..	69,837	75,299
..	..	..	..	..	..	..	..	..	5,423
..	..	..	..	..	..	281	..	3,196	5,559
2	..	270	201	4,905	..	666	1,80,970	1,80,970	2,38,596
..	..	199	308	..	..	..	..	69,349	85,620
..	..	403	69	..	..	..	..	35,619	47,274
..	..	..	..	..	..	..	..	..	..
..	..	4	351	..	..	..	..	5,824	6,148
..	..	..	..	..	..	..	8,945	9,539	7,500
..	..	..	20	..	..	..	..	7,617	12,623
..	..	606	748	..	..	..	8,945	1,27,948	1,59,165
..	11	..	..	..	..	..	..	2,048	2,528
..	..	..	..	..	..	..	..	4,671	4,883
..	..	..	..	..	..	..	..	1,088	939
..	..	..	..	..	..	..	..	5,007	5,602
..	..	..	..	..	..	..	..	9,898	7,919
..	11	..	..	..	..	..	..	22,712	21,821
— 250	..	..	..	..	..	..	..	— 906	— 1,454
252	3,166	4,503	3,287	4,905	..	666	17,967	9,65,488 (a)— 425	13,19,524
								9,65,063 (a)+6,459	
								9,71,522	

Summary of Revenue and

Budget heads.	First Circle.	Second Circle.	Third Circle.	Fourth Circle.	Fifth Circle.	Sixth Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
EXPENDITURE—*cont.*						
8. *c. Establishments.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. 1. Pay of officers—						
Non-voted	85,537	70,107	..	76,008	83,726	82,312
Voted	35,094	25,319	..	20,895	32,113	53,386
2. Pay of Establishments—						
Voted—						
Permanent	2,27,156	2,29,622	— 63	2,19,394	2,01,894	2,22,666
Temporary	6,773	4,149	..	8,409	4,205	7,810
3. Allowances—Non-voted—						
Travelling allowance ..	13,720	10,549	..	10,583	15,743	16,407
Cost of passages ..	1,920	404	..	9,025	23	1,861
Voted—						
Travelling allowance ..	28,882	28,518	— 23	23,243	26,319	36,574
Fixed travelling allowance.	10,017	10,539	..	9,940	9,188	12,009
Other compensatory ..	3,915	4,917	4	2,980	3,602	8,279
4. Contingencies and supplies and services.	..	..	..	481	..	..
Non-voted—						
Rates and taxes ..	3,759	1,977	..	..	2,447	608
Voted—						
Rents of Public Works Department buildings	13,143	10,221	252	17,730	9,914	8,477
Apparatus and materials..	926	825	..	853	744	663
Service postage and telegram charges.	5,169	5,730	..	6,129	4,834	5,483
Tour charges ..	2,988	4,208	..	2,853	2,433	2,205
Office expenses ..	1,902	4,007	..	2,902	3,878	1,872
Miscellaneous ..	4,138	2,277	..	1,479	896	1,674
Telephone charges ..	38	..	..	..	..	..
Deduct recoveries on account of Public Works Department buildings.	— 4,054	— 2,441	— 252	— 5,625	— 3,182	— 612
Total ..	4,41,023 (*a*) + 6	4,10,928	— 82	4,07,279 (*a*) + 1	3,98,777 (*a*) — 2	4,61,674 (*a*) + 2
8. C. B. Research	..	..	..	..	..	..
8. C. C. Exploitation	..	..	..	..	..	..
8. C. D. Forest College	..	..	..	..	..	..
8. C. E. Chenchu Officer ..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..
52-*A. Capital Outlay on Forests.*						
I. (*a*) Forest surveys	295	..	..	620	..	..
(*b*) Organization, improvements and extension of Forests—Reserved—						
A. Demarcation—Voted—						
Demarcation	1,581	..	..	488	277	118
Cost of forest settlement and compensation for land and rights.	..	..	..	76	..	..
B. Sowing and planting ..	4,799	..	..	..	1,006	..
C. Other charges—Voted—						
Working plans ..	..	..	19,554	..	..	2,475
Other miscellaneous charges.	..	..	..	52	— 20	..
Total I ..	6,675	..	19,554	1,236	1,263	2,593

(*a*) Added or deducted with reference to Accountant General's actuals.

Expenditure for 1931-32—*cont.*

Forest Engineer.	Forest Utilization Officer.	Parlakimedi Maliahs.	Golgonda Agency.	Forest College.	Provincial Sylviculturist.	Chenchu officer.	Chief Conservator.	Total. 1931-32.	Total. 1930-31.
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
..	..	1,166	..	..	..	..	..	8,98,856	4,21,169
..	..	7,926	..	..	..	..	352	1,75,058	1,71,990
..	..	15,908	3,637	..	..	..	..	11,53,817	11,71,564
..	..	1,201	1,056	..					
..	..	303	..	..	..	..	..	67,305	76,228
..	..	..	..	..	..	..	4,693	17,926	16,613
..	..	2,791	900	..	..	..	..	1,47,204	1,84,268
..	..	572	196	..	..	..	..	52,461	55,025
..	..	286	132	..	..	..	..	24,115	25,533
..	..	..	..	..	..	..	..	481	..
..	..	..	62	..	..	..	..	8,853	8,467
..	..	1,953	324	..	..	..	..	62,014	33,785
..	..	58	..	19	..	..	..	4,088	4,564
..	..	215	39	..	..	..	..	27,599	31,830
..	..	407	113	..	..	..	..	15,207	19,030
..	..	793	3	..	..	..	..	15,357	17,628
2	1	199	62	..	..	..	..	10,728	10,919
..	..	..	..	..	..	..	..	38	..
..	..	— 711	..	..	..	..	..	— 16,877	13,201
2	1	33,067	6,524	19	..	..	5,045	21,64,257 (a)+7	..
								(c)+11,435	
								21,75,699	
..	..	..	..	..	..	..	..	20,124	52,281
..	..	..	..	..	..	..	..	68,741	1,33,892
..	..	..	..	..	..	..	..	67,766	79,857
..	..	..	..	..	..	..	..	25,378	27,157
..	..	..	..	..	..	..	..	23,57,708	25,55,001
..	..	..	10	..	..	..	..	925	6,281
..	..	..	137	..	..	..	..	2,601	8,727
..	..	..	..	..	..	..	..	76	..
..	..	..	..	..	..	..	..	5,805	14,268
..	..	..	..	..	..	..	..	22,029	18,294
..	..	..	..	..	..	..	..	32	
..	..	..	147	..	..	..	..	31,468	47,565

Summary of Revenue and

Budget heads.	First Circle.	Second Circle.	Third Circle.	Fourth Circle.	Fifth Circle.	Sixth Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
EXPENDITURE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
52-*A. Capital Outlay on Forests* —cont.						
(*c*) Communications and buildings—						
A. Roads and bridges—						
Works in progress	3,123	290	..	1,196	..	2,559
New works	2,295	2,140	..	464	279	2,902
B. Buildings—						
Works in progress	915	..	..	1,614	1,561	637
New works	1,798	1,299	..	414	9,595	10,568
C. Other works—						
Works in progress	461	..	..	..	..	751
New works	..	..	..	195	..	2,012
Total (*c*) ..	8,592	3,729	..	3,883	11,435	19,429
(*d*) Railways and tramways ..	2,623	..	..	..	..	..
(*e*) Livestock, stores, tools and plant—						
A. Livestock—Purchase of livestock	45	..	..	..	2,685	4,482
B. Stores, tools and plant..	715	210	1,747	..	534	2,053
Total (*e*) ..	760	210	1,747	..	3,219	6,535
(*g*) Investments in Government commercial undertakings—						
A. Russellkonda saw mill.	56,236	..	..	..	..	..
B. Mount Stuart Forests..	..	..	..	..	— 20,050	..
C. Nilambur valley forests.	..	..	..	..	..	1,585
D. Chenat Nair Exploitation scheme including Olavakote saw mill ..	..	..	..	..	..	..
Loss or gain by exchange.	..	..	..	..	..	..
Total (*g*) ..	56,236	..	..	..	— 20,050	1,585
II. *Deduct* receipts and recoveries on capital account ..	..	..	..	..	— 2,550	..
III *Deduct* English cost of stores	— 2,623	..	..	..	..	..
IV. Expenditure in England ..	+ 2,623	..	..	..	..	..
Total ..	72,249	3,939	21,301	5,409	— 6,611	..
	(*a*) +31		(*a*) + 13	..	..	80,142

Expenditure for 1931-32—*cont.*

Forest Engineer. (8)	Forest Utilization officer. (9)	Parlakimedi Maliahs. (10)	Golgonda Agency. (11)	Forest College. (12)	Provincial Sylviculturist. (13)	Chenchu Officer. (14)	Chief Conservator. (15)	Total. 1931-32. (16)	Total. 1930-31. (17)
			Rs.			Rs.	Rs.	Rs.	Rs.
9,501	..	..	..	..	..	..	..	16,669	37,542
..	..	..	..	..	..	..	..	8,080	33,387
..	..	..	..	..	..	..	..	4,727	13,126
..	..	..	84	..	..	..	..	23,758	48,229
..	..	..	..	..	..	134	..	1,346	3,205
..	..	..	..	..	..	249	..	2,456	4,938
9,501	...	..	84	..	..	383	..	57,036	1,40,422
								(a) + 41	
								(c) +3,825	
..	..	..	..	..	..	..	2,623	60,902	
..	..	..	..	..	..	..	..	7,212	30,381
— 3,683	..	..	..	..	..	..	..	2,262	20,204
	..	..	16	..	..	..	670		
— 3,683			16				670	9,474	50,585
					..			(a) + 362	
								(c) + 2,595	
								12,431	
..	..	..	..	..	..	..	..	56,236	— 1,500
..	..	..	..	..	..	..	..	— 20,050	— 42,804
8,500	..	..	..	..	..	..	..	10,085	— 51,911
— 51,156	..	..	..	..	..	..	..	— 51,156	1,86,202
..	..	..	..	..	..	..	..	..	..
— 42,656	..	..	..	..	..	..	..	— 4,885	
..		..	..	..	..	..	..	(c)+ 1,785	
								— 27,485	
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..
— 36,838	..	..	247	..	..	383	670	90,891	..
..	..	..	..	..	..	..	..	(a) + 42	..
..								90,933	

Summary of Revenue and

Budget heads.	First Circle.	Second Circle.	Third Circle.	Fourth Circle.	Fifth Circle.	Sixth Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
EXPENDITURE—*cont.*						
52. *A. f. Establishments.*						
A. Pay of officers—						
Non-voted	..	..	54,722	..	..	..
Voted	..	..	28,937	..	..	..
B. Pay of establishments—						
Voted—						
Permanent	..	..	45,822	..	..	..
Temporary	..	..	14,230	..	..	..
C. Other charges—Non-voted—						
Travelling allowances (including cost of passages) ..	..	..	12,175	..	..	..
Voted—						
Travelling allowances ..	..	..	20,885	..	..	..
Fixed travelling allowances..	..	..	6,873	..	..	..
Other compensatory	..	..	4,019	..	..	..
Contingencies	..	..	5,092	..	..	..
Supplies and Services.. ..	..	..	1,598	..	..	..
Total ..	..	..	1,94,353	..	..	..
8. (*c*) (ii) Research..	..	..	20,124	..	..	..
Abstract.						
VIII. Forest—Receipts	..	..	..	..	..	..
8. *Expenditure*—						
(*a*) General Direction—Chief Conservator's Office.	..	..	..	..	..	..
(*b*) Conservancy, Maintenance and Regeneration.	..	..	..	..	..	..
(*c*) A, C and D.—District Establishments including the Engineering, Utilization Officers' Division and Forest College.	..	..	..	..	..	..
B. Provincial Sylviculturist.	..	..	..	..	..	..
E. Chenchu Officer ..	..	..	..	..	..	..
(*d*) Losses in Government Commercial undertakings.	..	..	..	..	..	..
(*e*) Loss by exchange ..	..	..	..	..	..	..
Expenditure in England.	..	..	..	..	..	..
20. Interest—Interest on deposits from Depreciation Reserve of Government commercial undertakings.	..	..	..	..	..	..
52. A. *Capital Outlay on Forests.*						
(*a*) Forest surveys ..	..	..	..	..	..	..
(*b*) Organization, Improvement and Extension of Forests—Reserved.	..	..	..	..	..	..
(*c*) Communications and Buildings.	..	..	..	..	..	..

Expenditure for 1931-32—*cont.*

Forest Engineer.	Forest Utilization officer.	Parlakimedi Maliahs.	Golgonda Agency.	Forest College.	Provincial Sylviculturist.	Chenchu officer.	Chief Conservator.	Total. 1931-32.	Total. 1930-31.
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
								Rs.	Rs.
								54,722	71,575
								28,937	23,899
								45,822	56,782
								14,230	
								12,175	7,510
								20,835	24,709
								6,873	6,672
								4,019	4,644
								5,092	5,478
								1,598	1,832
								1,94,353	2,13,101
								20,124	
								42,54,874	50,17,898
								1,30,850	1,16,204
								9,71,522	13,19,524
								23,12,223	24,75,562
								63,963	52,281
								25,378	27,158
									3,704
									2,098
								1,87,507	1,64,280
									1,502
								924	6,281
								30,556	41,284
								60,902	1,40,422

Summary of Revenue and

Budget heads.	First Circle.	Second Circle.	Third Circle.	Fourth Circle.	Fifth Circle.	Sixth Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
EXPENDITURE—*cont.*						
52. *A. Capital Outlay on Forests* —cont.						
						Ab
(*d*) Railways and Tramways.	..	..	..	..	..	..
(*e*) Livestock, stores, tools and plant.	..	..	..	..	..	..
(*f*) Establishments : Working Plans Circle.	..	..	..	..	..	..
(*g*) Investments in Government Commercial undertakings.	..	..	..	..	..	..
(*i*) *Deduct*—Receipts and Recoveries on Capital Account.	..	..	..	..	..	..
(*j*) Deduct—English cost of stores.	..	..	..	..	..	..
Grand total ..	..	..	..	..	..	..
Surplus ..	..	..	..	..	..	..

(*a*) Added or deducted with reference to the Accountant-General's actuals.
(*c*) Represents March supplemental adjustments.

Expenditure for 1931-32—*cont.*

Forest Engineer. (8)	Forest Utilization officer. (9)	Parlakimedi Malihs. (10)	Golgonda Agency. (11)	Forest College. (12)	Provincial Sylviculturist. (13)	Chenchu officer. (14)	Chief Conservator. (15)	Total. 1931-32. (16)	Total. 1930-31. (17)
stract.									
..	..	..	..	..	..	..	..	2,623	..
..	..	..	..	..	..	..	..	12,431	50,585
..	..	..	..	..	..	..	..	1,94,353	2,13,101
..	..	..	..	..	..	..	..	— 3,100	2,82,417
..	..	..	..	..	..	..	..	— 3,344	27,485
..	..	..	..	..	..	..	..	— 2,623	..
..	..	..	..	..	..	..	..	39,86,787	43,04,084
..	..	..	..	..	..	..	..	2,68,087	7,13,814

ANNUAL FORM NO. 41.

Forest Department, Madras Presidency.

Revenue received and outstandings on account of revenue during the year 1931–32.

District.	Particulars.	Outstandings at commencement of the year.	Value of sales and other revenue during the year.	Total.	Amount realized during the year.	Balance due to the department at the end of the year.
First Circle.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Direction	....	..	57,415 0 0	57,415 0 0	57,415 0 0	..
Ganjam	....	4,088 13 0	76,732 0 1	80,820 13 1	68,556 0 0	12,264 13 1
Vizagapatam	....	2,684 1 0	41,674 1 0	44,358 2 0	44,358 0 0	0 2 0
Godavari, Upper	....	2,691 5 0	58,237 13 2	60,929 2 2	60,668 0 0	261 2 2
Do. Lower	....	7,853 3 0	1,77,395 5 2	1,85,248 8 2	1,78,268 0 0	6,980 8 2
Guntur	....	10,417 4 0	1,08,779 0 0	1,19,196 4 0	1,11,517 0 0	7,679 4 0
Nellore	....	57,381 2 0	67,410 2 0	1,24,791 4 0	74,050 0 0	50,741 4 0
	Total ..	85,115 12 0	5,87,643 5 5	6,72,759 1 5	5,94,832 0 0 (*b*) 42,501 0 0	(*a*) 77,927 1 5
Second Circle.						
Direction	Timber and other produce.	..	82 9 0	82 9 0	82 9 0	..
Anantapur	Do.	1,24,509 5 1	2,21,233 6 6	3,45,742 11 7	2,59,296 12 7	86,445 15 0
Kurnool, East	Do.	0 8 0	48,770 15 7	48,771 7 7	47,247 0 7	1,524 7 0
Do. South	Do.	16,630 10 0	1,40,197 8 3	1,56,828 2 3	99,798 8 3 (*a*) 15 0 0	57,014 10 0
Do. West	Do.	26,203 3 0	1,32,007 2 1	1,58,210 5 1	1,27,759 13 1	30,450 8 0
Cuddapah, North	Do.	20,658 13 0	71,556 8 9	92,215 5 9	78,897 5 9	13,318 0 0
Do. South	Do.	4,637 3 0	1,73,550 5 2	1,78,187 8 2	1,18,751 3 0	59,436 5 2
	Total ..	1,92,639 10 1	7,87,398 7 4	9,80,038 1 5	7,31,848 4 3 (*c*) + 219 0 0	(*b*) 2,48,189 13 2

Fourth Circle.

Direction	Timber and other forest produce.	..	7,418 1 10	7,418 1 10	7,418 1 10	..	
Chittoor	Do.	..	78,358 12 11	78,358 12 11	78,292 12 11	66 0 0	
Vellore	Do.	2,683 4 0	3,55,800 2 2	3,58,483 6 2	3,58,335 9 2	147 13 0	
Salem, North	Do.	313 10 0	1,56,310 10 5	1,56,624 4 5	1,56,522 11 5	101 9 0	
Do Central	Do.	718 10 5	1,64,509 13 10	1,65,228 8 3	1,64,824 0 3	404 8 0	
Do. South	Do.	100 0 0	1,03,143 5 9	1,03,243 5 9	1,03,212 5 9	31 0 0	
	Total ..	3,815 8 5	8,65,540 14 11	8,69,356 7 4	(c) 8,68,605 9 4	(b) 750 14 0	
					(a) —15,416 4 0		

Fifth Circle.

Direction	Timber and other forest produce.	..	66 14 0	66 14 0	66 14 0	..	
Kollegal	Do.	2,447 3 3	1,80,588 1 4	1,83,035 4 7	1,76,535 9 2	6,499 11 5	
Coimbatore, North ..	Do.	31,975 2 0	2,72,844 10 7	3,04,819 12 7	(c) 1,69,448 9 4	1,35,371 3 3	
Do. South ..	Do.	(a) 80,916 8 0	(e) 2,00,774 5 9	2,81,690 13 9	1,83,946 14 9	(b) 97,743 15 0	
Madura	Do.	98,740 2 9	1,54,557 1 5	2,53,297 4 2	1,90,550 12 1	61,746 8 1	
					(f) 2,235 2 1		
Tinnevelly	Do.	2,375 1 0	1,22,536 4 7	1,24,910 5 7	(d) 1,23,497 13 7	1,412 8 0	
Tanjore	Do.	..	14,294 14 7	14,294 14 7	14,294 14 7	..	
	Total ..	2,16,454 1 0	9,45,661 4 3	11,62,115 5 3	8,59,341 7 6	3,02,773 13 9	
					(h) — 189 0 0		
					(f) — 2,235 2 1		
Coimbatore, South ..	Timber and other forest produce (commercial).	7,422 5 0	87,635 3 1	95,057 8 1	92,034 11 1	3,022 13 0	
	Total ..	2,23,876 6 0	10,33,296 7 4	12,57,172 13 4	9,51,376 2 7	(g) 3,05,796 10 9	
					(f) 2,235 2 1		

Sixth Circle.

Mangalore, North ..	Timber and other forest produce.	25,144 11 6	89,476 4 0	1,14,620 15 6	88,115 0 0	26,505 15 6	
Do. South ..	Do.	34,894 8 5	1,15,369 1 8	1,50,263 9 11	1,15,001 0 0	35,262 9 11	
Wynad	Do.	59,710 3 6	1,70,544 0 10	2,30,254 4 4	1,95,209 0 0	35,045 4 4	
The Nilgiris	Do.	19,691 9 11	96,065 12 10	1,15,757 6 9	1,07,718 8 0	8,026 6 9	
Palghat	Do	1,49,869 14 0	2,07,598 0 0	3,56,967 14 0	(a) + 12 8 0	1,26,569 14 0	
					2,30,398 0 0		

Revenue received and outstandings on account of revenue during the year 1931–32—*cont.*

District.	Particulars.	Outstandings at commencement of the year.	Value of sales and other revenue during the year.	Total.	Amount realized during the year.	Balance due to the department at the end of the year.
Sixth Circle—cont.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Nilambur	Timber and other forest produce.	..	1,53,793 0 0	1,53,793 0 0	1,53,793 0 0	..
Direction	Do.	..	1,402 0 0	1,402 0 0	1,402 0 0	..
	Total ..	2,88,810 15 4	8,34,248 3 2	11,23,059 2 6	(*c*) 8,91,649 0 0	(*b*) 2,31,410 2 6
					(*d*) — 2,889 0 0	
					(*e*) + 48 0 0	
Add—						
Parlakimedi Maliahs ..	..	..	..	..	37,852 0 0	..
Golgonda Agency ..	..	..	..	..	5,044 0 0	..
Working Plan Circle ..	..	..	..	..	789 0 0	..
Forest Utilization Officer.	..	..	..	..	27 0 0	..
Forest Engineer ..	..	..	..	..	2,478 0 0	..
Forest College	..	..	..	..	57,057 0 0	..
Chief Conservator ..	..	..	..	..	3,116 0 0	..
	Grand Total, Presidency.	..	..	..	40,31,096 0 0	..
					(*a*) + 2,23,778 0 0	
					42,54,874 0 0	..

Note for First Circle.
(*a*) Of this Rs. 7,105 fell due during the year 1931–32 and Rs. 50,740 represent balance of lease amounts of Sriharikota fuel coupes (Nellore) to be worked in 1932–33 but sold in March 1932.
(*b*) Added with reference to the Accountant-General's actuals.

Note for Second Circle.
(*a*) Compensation amount written off in Kurnool District Magistrate's L. Dis. No. 4630/31, dated 22nd October 1931, as the accused in the forest offence has undergone imprisonment.
(*b*) Out of this amount, the sum of Rs. 2,41,760-0-2 falls due after 31st March 1932.
(*c*) Added with reference to the Accountant-General's actuals.

Note for Fourth Circle.
(*a*) Deduct refunds not taken into account.
(*b*) There are no outstandings on account of sales effected by the Forest Utilization officer.
(*c*) Revenue as per Form No. 39 is Rs. 8,68,605. The difference of Re. 0-9-4 is due to figures in Form No. 41 having been worked out to the nearest pie.

Note for Fifth Circle.

(a) Includes Rs. 68,918 on account of sales effected by the Forest Utilization Officer.
(b) Includes Rs. 89,247-8-0 on account of sales effected by the Forest Utilization Officer.
(c) Includes Rs. 2,539 relating to the Nilgris and includes Rs. 379-15-0 realization in that district.
(d) Includes Rs. 6,080-15-11 realized in the Fourth Circle on account of sale of sandalwood.
(e) Includes the value of sleepers supplied to railways during 1931-32.
(f) Deleted from the accounts under proper sanction.
(g) Out of this, a sum of Rs. 15,537-13-10 represents overdues which includes Rs. 10,014-10-9 due from contractor A. Subba Pillai whose letter patent appeal is still pending in the High Court. Out of this amount, a sum of Rs. 6,772-7-2 has since been written off as it had been made good by amount realized by re-sale of the coupes.
(h) Deducted with reference to the Accountant-General's actuals.
(i) Written off.

Note for Sixth Circle.

(b) Out of this, a sum of Rs. 7,036-12-8 represents overdues, which includes Rs. 1,006-14-8 of the Nilgiri division under recovery in 1932-33.
(c) Includes Rs. 1,939 realized in the Fifth Circle on account of sale of sandalwood.
(d) Refunds.
(e) Added with reference to the Accountant-General's actuals.

General—(a) Represents March Supplemental adjustments.

ANNUAL FORM No. 42.

Forest Department, Madras Presidency.

Financial Results for the year 1931–32.

District.	Timber and other produce removed from the forest by Government Agency.		Other revenue.		Formation, protection and improvements of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
First Circle.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Ganjam	3,928	756	65,850	86,577	54,828	69,778	{ 1,42,161 +(b)56,236
Vizagapatam ..	4,940	4,945	40,257	43,528	7,665	45,197	56,138
Godavari, Upper.	29,462	7,140	31,775	67,070	30,114	61,237	1,04,324
Do. Lower.	2,145	10,319	1,76,325	83,993	24,049	1,78,470	1,18,361
Guntur	286	1,040	1,12,587	73,470	4,857	1,12,873	79,367
Nellore	10,409	12,572	1,21,001	53,826	7,036	1,31,410	73,434
Total ..	51,170	36,772	5,47,795	4,08,464	1,28,549	5,98,965 (a) — 4,133 + 2,501 (b) 5,97,332	5,73,785 + (b) 56,236
Second Circle.							
Anantapur ..	(a) 1,104	197	2,59,254	58,887	18,238	2,60,358	77,322
Kurnool, East ..	1,403	1,175	45,857	54,633	18,874	47,260	74,682
Do. South.	12,107	3,876	87,719	63,421	20,479	99,826	87,776
Do. West ..	4,740	1,002	1,23,037	74,088	26,423	1,27,777	1,01,513
Cuddapah, North.	109	..	78,802	53,827	17,145	78,911	70,972
Do. South.	(b) 6,130	1,464	1,12,724	65,643	20,645	1,18,854	87,752
Total ..	25,593	7,714	7,07,393	3,70,499	1,21,804	7,32,986 (c) + 219	5,00,017
Fourth Circle.							
Chittoor	3,567	2,068	74,746	73,784	21,322	78,313	97,174
Vellore	1,32,545	9,463	2,25,866	1,11,411	19,994	3,58,411	1,40,868
Salem, North ..	92,847	17,776	63,700	80,388	(a) 35,282	1,56,547	1,33,446
Do. Central ..	14,004	4,199	1,50,892	82,047	11,531	1,64,896	97,777
Do. South ..	13,929	4,234	89,323	58,199	9,924	1,03,252	72,357
Total ..	2,56,892	37,740	6,04,527	4,05,829	98,053	(b) 8,61,419 (c)— 15,416	5,41,622
Fifth Circle.							
Kollegal ..	1,12,250	13,485	64,297	65,951	14,132	1,76,547	93,568
Coimbatore, North.	66,409	21,370	1,03,050	77,063	27,550	1,69,459	1,25,983
Do. South.	97,494	85,904	86,464	48,162	43,254	1,83,958	1,77,320
Madura	1,772	1,140	1,89,790	96,735	25,230	1,91,562	1,23,105
Tinnevelly ..	10,160	6,246	1,13,349	64,735	12,611	1,23,509	83,592
Tanjore	..	15	14,306	1,487	267	14,306	1,769
Total ..	2,88,085	1,28,160	5,71,256	3,54,133	1,23,044	(a) 8,59,341 (b) — 189	6,05,337

Note for the First Circle—(a) Refunds.
(b) Government commercial undertakings—1. Russellkonda Sawmill.

Note for the Second Circle—(a) Includes the sum of Rs. 1,049 being the value of sandalwood realized in Vellore division. (b) Includes the sum of Rs. 89 being the value of sandalwood realized in Vellore division. (c) Added with reference to Accountant-General's actuals.

Note for the Fourth Circle—(a) Includes Rs. 20,124 spent on the investigation of spike disease in sandal in the North Salem division under "8. c." Research ii. (b) Excludes Rs. 7,186 sandalwood revenue relating to other circles. (c) Refunds. The figures in this return agree with Form No. 39.

Note for the Fifth Circle—(a) Excludes Nilgiri Revenue (Rs. 1,939 + Rs. 380) and includes Rs. 6,031 credited in the Fourth Circle and Rs. 380 credited in the Nilgiris district. (b) Deducted to tally with Accountant-General's actuals.

Financial Results for the year 1931-32—*cont.*

District.	Timber and other produce removed from the forests by Government agency.		Other revenue.		Formation, protection and improvements of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts	Charges.
Sixth Circle.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Mangalore, North.	39,882	36,982	48,318	40,603	7,091	88,200	84,676
Do. South.	80,766	99,875	34,320	27,048	15,243	1,15,086	1,42,166
Wynaad	1,68,793	1,73,513	26,501	22,154	95,450	1,95,294	2,91,117
The Nilgiris ..	80,311	52,618	28,397	37,799	35,875	(*c*) 1,08,708	1,26,292
Palghat	1,41,082	1,07,487	89,401	38,458	41,254	2,30,483	1,87,199
Nilambur	(*b*)1,53,878	(*b*)82,514	..	..	..	(*b*) 1,53,878	(*b*) 82,514
Inspector of Live-stock.	..	7,737	..	..	..	..	7,737
Total ..	6,64,712	5,60,726	2,26,937	1,66,062	1,94,913	(*c*) 8,91,649 (*a*) — 2,889 8,88,760 (*f*) + 48	(*d*)9,21,701
General.							
Parlakimedi Maliahs.	..	..	..	..	..	37,852	37,570
Golgonda Agency.	..	..	..	..	..	5,044	10,058
Forest Utilization Officer.	..	..	..	..	..	27	68,741
Forest Engineering Branch.	..	..	..	..	..	2,473	
Forest College ..	..	..	..	..	..	57,057	67,766
Working Plans Circle.	..	..	..	..	..	789	1,94,353
Chief Conservator.	..	..	..	..	..	3,116	1,30,850
Provincial Sylviculturist.	..	..	..	..	..	..	63,693
Chenchu Officer ..	..	..	..	..	..	..	25,378
Expenditure in England.	..	..	..	..	..	..	..
	..	..	..	..	..	40,31,096 (*a*)+2,23,778	39,61,482 (*a*)+25,305
						42,54,874	
							39,86,787

Note for the Sixth Circle—(*a*) Refunds. Deducting them the revenue will be Rs. 8,88,760 (vide paragraph 39 of the report). (*b*) Figures represent revenue and expenditure for the whole division. (*c*) Revenue of Direction has been apportioned amongst divisions. (*d*) Expenditure under Direction has been apportioned among divisions. (*e*) Includes Rs. 1,939 realized in the Fifth Circle. (*f*) Added to tally with Accountant-General's actuals.

General—(*a*) Represents March Supplemental adjustments.

ANNUAL FORM No. 43.

Forest Department, Madras Presidency.

PART I.

Statement of Livestock (1) elephants and (2) other livestock during 1931-32.

District	On hand at the commencement of the year.		Number received during the year.	Number disposed of during the year.	On hand at the end of the year.		Total expenditure on maintenance during the year.
	Number.	Value.			Number.	Value.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) ELEPHANTS.							
First Circle.		RS.				RS.	RS. A. P.
Godavari, Upper..	2	6,204	..	..	2	7,329	(*b*) 2,098 0 0
		(*a*)+ 1,125	..	..	..	..	..
Do. Lower..	1	2,500	..	..	1	2,500	853 0 0
Total ..	3	9,829	..	..	3	9,829	2,951 0 0
Second Circle.							
Kurnool, West ..	2	4,000	..	..	2	4,000	864 4 0
		..	..	..	..	..	* 930 0 0
		..	..	..	..	..	† 136 15 0
Total ..	2	4,000	..	..	2	4,000	1,931 3 0
Fourth Circle—Nil.							
Fifth Circle.							
Coimbatore, South.	34	76,850	..	15	19	59,600	27,668 10 0
Total ..	34	76,850	..	15	19	59,600	27,668 10 0
Sixth Circle.							
Mangalore, North.	7	12,200	..	3	4	5,200	4,480 3 9
Do. South.	12	24,400	4	2	14	31,000	9,460 11 9
Wynaad	37	74,900	18	14	41	79,150	28,519 0 0
Nilambur	22	70,500	1	2	21	63,600	17,962 7 11
Nilgiris	11	22,400	3	7	7	22,600	6,422 2 11
Palghat	4	10,000	..	4	4	..	..
Total ..	93	2,19,400	26	32	87	2,01,550	66,844 10 4
Grand Total, Presidency.	132	3,10,079	26	47	111	2,74,979	99,395 7 4
(2) OTHER LIVESTOCK.							
First Circle.							
Nellore	‡ 1	40	‡ 1	‡ 1	‡ 1	45	5 0 0
Total ..	1	40	1	1	1	45	5 0 0
Second Circle.							
Anantapur ..	‡ 2	75	..	..	‡ 2	75	20 0 0
		..	..	..	..	..	† 34 1 0
		..	..	..	..	..	54 1 0
Total ..	2	75	..	..	2	75	54 1 0

Note for the First Circle.—(*a*) The plus entry is due to adoption of the original value of the elephant Sarasvati obtained from Revenue records and to addition of the cost of transport of Chenchalpyari from Sonepur to Upper Godavari to the capital cost of the elephant.

(*b*) Out of Rs. 2,098 two-fifths is debitable to the Revenue Department.

Note for the Second Circle.—* Pay of establishment.

† Expenditure on account of the Inspector of Live-stock. ‡ Buffaloes.

Statement of Livestock (1) elephants and (2) other livestock during 1931-32—*cont.*

District.	On hand at the commencement of the year.		Number received during the year.	Number disposed of during the year.	On hand at the end of the year.		Total expenditure on maintenance during the year.
	Number.	Value.			Number.	Value.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Rs.				Rs.	Rs. A. P.
(2) OTHER LIVESTOCK—*cont.*							
Fourth Circle.							
Chittoor	1	15	..	..	1	15	51 12 0
Total ..	1	15	..	..	1	15	51 12 0
Fifth Circle—Nil.							
Sixth Circle.							
Wynaad	9	799	3	10	2	378	754 0 0
Nilambur	22	1,680	..	2	20	1,450	3,600 13 4
Nilgiris	4	305	2	2	4	305	1,524 8 2
Total ..	(a) 35	2,784	(b) 5	(c) 14	(d) 26	2,138	5,879 5 6
Grand Total, Presidency.	39	2,914	6	15	30	2,268	5,990 2 6

(a) 26 buffaloes, 4 bulls and 5 asses.
(b) 2 bulls and 3 asses.
(c) 4 buffaloes, 2 bulls and 8 asses.
(d) 22 buffaloes and 4 bulls.

PART II.

Statement of Elephants gone off the list during the year 1931–32.

District.	Names.	When purchased or otherwise obtained by Government.	Age.	How disposed of.
		First Circle—Nil.	YRS.	
		Second Circle—Nil.		
		Fourth Circle—Nil.		
		Fifth Circle.		
South Coimbatore.	1. Kamala ..	Captured on 23rd August 1928 ..	20	Sold on 20th April 1931.
	2. Lakshmi ..	Do. 12th September 1929.	27	Sold on 25th July 1931.
	3. Tharabai ..	Do. 25th October 1929 ..	62	Do.
	4 Rangi ..	Do. do. ..	2½	Do.
	5. Pushpa ..	Do. 25th July 1930 ..	5½	Died on 24th April 1931 and written off in Conservator's sanction Order No. 57/31, dated 5th May 1931.
	6. Kaveri ..	Do. 3rd July 1930 ..	7	Sold on 20th April 1931.
	7. Chandra ..	Do. 19th October 1930 ..	5½	Sold on 25th July 1931.
	8. Kanthimathi.	Do. do. ..	56	Died on 1st May 1931 and written off in Conservator's sanction Order No. 58/31, dated 9th May 1931.
	9. Viswanath ..	Do. do. ..	5½	Sold on 25th July 1931.
	10. Kowsallya ..	Do. 23rd November 1930.	5½	Do.
	11. Karthiyaini.	Do. do.	3½	Do.
	12. Sakuntala ..	Do. 17th November 1930.	5½	Died on 3rd June 1931 and written off in Conservator's sanction Order No. 29/31, dated 23rd June 1931.
	13. Vimala ..	Do. 2nd December 1930.	5	Sold on 25th July 1931.
	14. Vasudevan ..	Do. 11th December 1930.	5½	Do.
	15. Sumatrai ..	Do. do.	5½	Sold on 20th April 1931.
		Sixth Circle.		
North Mangalore.	Cæsar	Captured on 12th February 1910.	32	Transferred to South Mangalore division.
	Rukmani ..	Do. 22nd May 1926 ..	23	Do.
	Rustom	Born to elephant Peri on 1st February 1929.	3	Transferred to Wynaad division.
South Mangalore.	Mohan	Born to Isabella on 5th December 1929.	2	Do.
	Rukmani ..	Captured on 22nd May 1926 ..	28	Do.
Wynaad.	Madhavan ..	Do. 12th March 1906 ..	29	Died.
	Chandramathi ..	Do. 22nd February 1927.	49	Transferred to South Mangalore division.

Statement of Elephants gone off the list during the year 1931-32—*cont.*

District.	Names.	When purchased or otherwise obtained by Government.	Age.	How disposed of.
		Sixth Circle—cont.	YRS.	
Wynaad—*cont.*	Girija	Captured on 5th May 1928 ..	47	Transferred to South Mangalore division.
	Siruvani ..	Do. 7th March 1916 ..	30	Sold.
	Parvathi ..	Do. 6th April 1928 ..	26	Died.
	Bhisthi	Do. 16th February 1930.	4½	Sold.
	Seethamma ..	Do. 19th February 1931.	8	Do.
	Sugunthamma ..	Do. 4th April 1931 ..	6	Do.
	Radha	Do. do ..	2	Do.
	Madhavi ..	Do. 11th April 1931 ..	3	Do.
	Achuthan ..	Do. 1st March 1931 ..	7	Do.
	Rama	Do. 15th February 1931.	12	Do.
	Rustom	Born to elephant Peri on 1st February 1929.	3	Do.
	Mohan	Born to elephant Isabella on 6th December 1929.	2	Do.
Nilambur.	Bomman ..	Captured on 27th February 1913.	43	Died.
	Nithiyan ..	Do. 26th January 1928..	13	Do.
Nilgiris ..	Rama	Do. 15th February 1931.	12	Transferred to Wynaad division.
	Achuthan ..	Do. 1st March 1931 ..	7	Do.
	Kunthi	Do. do. ..	30	Do.
	Lalitha	Do. do. ..	35	Do.
	Sakuntala ..	Do. do. ..	15	Do.
	Damodaran ..	Born to Lalitha on 25th May 1931.	1	Do.
	Indrani	Born to Ganga on 21st January 1930.	2	Do.
Palghat ..	Govind	Captured on 23rd May 1926 ..	15	Died.
	Akbar	Do 10th February 1923.	17	Transferred to the Nilgiris division.
	Elsie	Do. 31st May 1907 ..	46	Transferred to Wynaad division.
	Kamakshi ..	Do. 11th April 1914 ..	34	Transferred to the Nilgiris division.
	Gulbahar ..	Do. 9th May 1931 ..	1¼	Sold.

ANNUAL FORM No. 44.

Forest Department, Madras Presidency.

Abstract showing the Value of Stores, Tools and Plant for 1931-32.

District.	Stores.						Difference.	
	On hand at the commencement of the year.		Additions or exclusions during the year.		On hand at the end of the year.		In favour of the year.	Against the year.
	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Value.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Rs.		Rs.		Rs.	Rs.	Rs.
First Circle.								
Direction	317	5,071	..	..	317	5,071	..	..
Ganjam	4,521	1,58,034	352 (a) 108	2,815 1,43,490	4,765	17,359	..	1,40,675
Visagapatam	1,571	8,828	29 (a) 22	560 201	1,578	9,187	359	..
Upper Godavari	4,223	18,823 (c) — 127	98 (a) 107	737 155	4,214	19,278	582	..
Lower Godavari	3,028	36,823	96 (a) 43	215 119	3,081	36,919 (b) + 1,052	1,148	..
Guntur	5,798	15,221	193 (a) 2,276	997 799	3,715	15,419	198	..
Nellore	38,326 + 9 miles of tram.	69,895	46 (a) 146	145 575	38,226	69,465	..	430
Total ..	57,784 + 9 miles of tram.	3,12,568	814 (a) 2,702	5,469 145,339	55,896	1,73,750	..	1,38,818
Second Circle.								
Direction	395	6,567	..	..	392	6,434	..	133
Anantapur	3,956	11,676	— 3 + 22 — 437	— 133 + 112 — 683	3,541	11,105	..	571
Kurnool, East	3,621	17,103	+ 145 — 165	+ 318 — 530	3,601	16,891	..	212

Do. South	3,649	16,729	+ 274 — 342	+ 514 — 1,577	3,581	15,666	..	1,063
Do. West	6,397	25,002	+ 111 — 1,163	+ 1,703 — 1,730	5,345	24,975	..	27
Cuddapah, North	3,915	13,372	+ 81 — 95	+ 1,021 — 108	3,901	14,285	913	..
Do. South	3,459	16,590	+ 21 — 77	+ 402 — 153	3,403	16,839	249	..
Total ..	25,392	1,07,039	+ 654 — 2,282	+ 4,070 — 4,914	23,764	1,06,195	..	844
Fourth Circle.								
Direction	226½	* 6,931	(a) 7 (b) 1	291 100	232½	7,122	191	..
Chittoor	4,017	13,350	(a) 335 (b) 323	1,598 945	4,029	14,003	653	..
Vellore	8,390	29,013	(a) 1,748 (b) 804	876 391	9,334	29,498	485	..
Salem, North	3,988	20,652	(a) 116 (b) 288	1,903 802	3,816	21,753	1,101	..
Do. Central	3,642	14,091	(a) 66 (b) 266	366 469	3,442	13,988	...	103
Do. South	† 3,971½	14,172	(a) 63 (b) 147½	1,582 521	3,887	15,233	1,061	..
Total ..	24,235	98,209	(a) + 2,335 (b) — 1,829½	(a) + 6,616 (b) — 3,228	24,740½	1,01,597	3,388	..

Note for the First Circle.—

(a) Represents exclusions and is made up as follows :—

Rupees 1,42,928 the book value of the Russellkonda Sawmill machinery and spare parts which were disposed of during the year.
2,411 value of articles sold or written off.

Rs. 1,45,339

(b) District Forest Officer, Lower Godavari, reports that articles not valued previously have been valued and values of some articles are enhanced with reference to their present condition and market value.

(c) District Forest Officer, Upper Godavari, reports that the difference is due to mistakes in totalling.

Note for the Fourth Circle.—

(a) Additions.

(b) Exclusions.

* Correct figure. The figure furnished last year was wrong due to error in calculation.

† Difference is due to omission of two articles in last year's return.

Abstract showing the Value of Stores, Tools and Plant for 1931-32—*cont.*

District.	Stores.						Difference.	
	On hand at the commencement of the year.		Additions or exclusions during the year.		On hand at the end of the year.		In favour of the year.	Against the year.
	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Value.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Rs.		Rs.		Rs.	Rs.	Rs.
Fifth Circle.								
Direction	268	3,012	(a) 6	86	221	2,898	..	114
			(b) 53	200				
Kollegal	2,634	9,703	(a) 161	1,217	2,741	10,747	1,044	..
			(b) 54	173				
North Coimbatore	3,439	14,362	(a) 156	808	3,573	15,108	746	..
			(b) 22	62				
South Coimbatore	4,693	57,842	(a) 246	1,531	3,193	54,617	..	3,225
			(b) 1,746	4,756				
Madura	3,525	10,515	(a) 107	711	3,352	10,770	255	..
			(b) 280	456				
Tinnevelly	3,692	15,750	(a) 452	237	4,088	14,412	..	1,338
			(b) 56	1,575				
Vernacular Training School ..	394	309	(a) 2	4	390	310	1	..
			(b) 6	3				
Total ..	19,646	1,11,493	(a) 1,130	4,594	17,558	1,08,862	..	2,631
.. ..			(b) 2,217	7,225				
.. ..								..
Sixth Circle.								
Direction	391	6,801	7	17	397	6,813	12	..
			— 1	5				
North Mangalore	1,773	13,701	75	1,011	1,723	13,385	..	316
			— 125	1,327				
South Mangalore	4,101	44,698	426	2,553	3,829	44,170	..	528
			— 698	3,081				
Wynaad	4,707	43,495	1,484	5,535	5,732	47,017	3,522	..
			— 459	2,013				..
Nilamban	2,566	18,693	288	3,327	2,462	20,550	1,857	..
			— 392	1,470				..
The Nilgiris	1,622	13,763	84	472	1,568	13,711	..	52
.. ..			— 138	524				

Palghat	1,984	12,249	186	623	2,020	12,361	112	..
			— 150	721				
Forest Engineer, Coimbatore.	9,188	2,00,118	225	717	9,227	1,99,693	..	426
			— 186	1,142				
Total ..	26,382	3,53,518	2,775	14,466	26,958	3,57,700	4,182	..
			— 2,149	10,283				
Forest Utilization Officer ..	157	3,298	— 4	— 426	153	2,872	..	426
Principal, Forest College ..	7,279	51,905	317	1,697	7,596	53,602	..	..
Parlakimedi Maliahs	895	5,797	+ 7	+ 123	(a) 894	5,870	73	..
			— 8	— 50				
Grand Total, Presidency ..	160,719	10,43,827	8,026	37,035	157,614	9,10,443	..	1,33,879
			— 11,192	— 1,71,415				

Note for the Fifth Circle.—
(a) Additions. (b) Exclusions.

Note for the Sixth Circle.—
(a) 894 shown in the closing balance of the last year's return is a mistake for 895.

Government of Madras

DEVELOPMENT DEPARTMENT

G.O. No. 1581, 8th December 1932

Forests—Administration report—1931-32—Recorded.

READ—the following paper:—

From the Chief Conservator of Forests, dated 20th October 1932,
Press No. 459/32.

Order—No. 1581, Development, dated 8th December 1932.

Recorded.

2. The report is an interesting record of steady progress on the lines laid down by Government in 1931, when it was decided to abandon large-scale mechanical exploitation, and concentrate on conservation, protection, and a limited kind of exploitation.

This policy does not lend itself to spectacular results; and the administration must be judged mainly by the degree to which it has steadily discharged the routine duties of conserving the forest property of the State and making its produce readily available for public use; and, further, by the attention it has paid to scientific research into the problems of regeneration and protection against injury by disease.

3. The area of reserved forest is unfortunately far too small to supply more than a small proportion of the public need for fuel, grazing, etc. Only ten per cent of the cattle of the Presidency obtained grazing in the forests including those handed over to panchayat managements; but while the number grazed in panchayat forests showed only a very small decrease as compared with last year, the cattle grazed in forests under departmental management fell from 1,531,661 to 1,409,175—a drop of 8 per cent. The Chief Conservator is investigating the cause of the difference between the two cases; but it may be surmised that while panchayat forests, having little tree-growth of any value, are notoriously apt to be over-grazed, the grazing in the forests under

departmenal management may have required special temporary restrictions in the interests of conservancy. The transfer of the issue of permits from commission agents to departmental agency (effected towards the close of the year in order to reduce expenditure) is mentioned by the Chief Conservator as a possible cause of the reduction in the number of permits issued.

4. Decrease occurred also in the amount of fuel, bamboos, and minor produce removed, whether departmentally or by private purchasers and others. In each case the decrease is attributable partly to the reduction in demand resulting from contraction in general purchasing power. But in the case of some minor produce, the competition of imported produce, e.g., African wattle competing with avaram bark, is noticed.

5. If the general economic conditions restricted the consumption of such necessities as fuel, grazing, etc., it is natural to expect no less a curtailment in the consumption of purely commercial products. In fact, the disposal of timber (except sandal-wood, which is in a class by itself and in respect of which special efforts were made to dispose of accumulated stocks) fell far short of the immediately preceding years. The output was only 63,740 tons, which is 25 per cent less than in 1930–31 which again was 11·7 per cent below the figure of 1929–30.

6. The result of these restricted sales of produce is that revenue, in the year under report, exceeded expenditure only by the insignificant figure of Rs. 8,000; or, if the net results of the " commercial concerns " (of which the principal were the Mount Stuart and Nilambur forests) are included, by 2·68 lakhs.

7. This is unpleasant, but inevitable. The prevailing economic difficulties affected forest revenues at every point; demand fell off, prices declined; and the only counter-measure available was a drastic reduction of expenditure which was effected to the extent of 3·17 lakhs, or nearly 8 per cent, by economies which will be of fuller effect in the current year.

In the circumstances it seems clear that the right policy during the period of depression is to augment the scientific knowledge of the department with a view to improving the value of the forest assets against the day when the market will again expand; to make as much progress as possible with plans for the future working of the forests, through the agency of the Working Plans staff and the Forest Engineer; to watch every movement of the market for forest products and be ready to supply the various demands that arise; and to maintain a rigid control of expenditure.

From the report under review it is clear that these objects are steadily kept in view.

8. Since the close of the year to which the report relates the retirement has occurred of the Chief Conservator, Mr. R. D. Richmond, C.I.E.

The Government wish to place on record their high appreciation of the manner in which Mr. Richmond has administered the Forest Department during the past more than five years.

(By order of the Governor in Council)

S. H. SLATER,
Secretary to Government.

To the Chief Conservator of Forests.
" Accountant-General.
" Board of Revenue.
" Secretary to the Government of India, Department of Education, Health and Lands (with C.L.).
" Inspector-General of Forests (with C.L.).
Press.

19 JAN. 1934

ADMINISTRATION REPORT OF THE

FOREST DEPARTMENT

OF THE MADRAS PRESIDENCY

FOR THE YEAR ENDING 31ST MARCH 1933

MADRAS
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS

Price, Rs. 2-4-0] 1934

Proceedings of the Chief Conservator of Forests

Proceedings No. 452, Press, 14th October 1933

Administration Report—Forest Department—1932-33.

A. WIMBUSH, Esq., I.F.S.,
Chief Conservator of Forests.

Proceedings—No. 452, Press, dated 14th October 1933.

I.—INTRODUCTION.

Mr. R. D. Richmond, C.I.E., retired with effect from 18th November 1932, from which date the writer of this report has held charge.

The year 1932-33 was one in which every possible economy had to be practised in view of the general economic depression. Seldom has so little money been made available for development, and consequently very little money was spent on new works, what little was available being devoted for the most part to preventing permanent deterioration to existing roads and buildings.

2. The timber market having been extremely dull for some time past, the felling of fresh stocks was restricted, and efforts were concentrated on disposing of the old stocks already in the depots. Much of this old stock was of poor quality, and in view of the fact that our working plans give us a sustained yield year after year, by carrying out fellings which are calculated to result in the progressive improvement of the forests, it was thought advisable to adopt the policy followed by all shop-keepers and to let the first consideration be the clearing of the old stocks in order to make room for new and better timber. In practice, as opposed to theory, this does not appear to result to any great extent in the man next door holding up the stocks which we previously held, with a consequent stagnation of trade and already the biggest purchaser of our old timber is demanding to be supplied with the better quality, squared logs which alone will be brought to our larger sale depots in future.

3. During the year effect was given to a fundamental change in the organization of the ministerial staff of the department which was referred to in last year's report. Since the formation of the Forest department, it had been the practice for the clerks of the District Forest offices to be borne on the Collector's cadre. The advantages and disadvantages of the interchange of clerks between the various Revenue and Forest offices has been the subject of much discussion in the past. Government have now decided that the Forest department should have its own cadre of clerks and the organization of this new arrangement was one of the outstanding administrative features of the year.

4. Progress has been maintained in the preparation of Working Plans and in the acquiring of sylvicultural knowledge by Research. A gratifying feature is the great advance made in recent years in our knowledge as to how to increase regeneration in the dry fuel forests, which constitutes such a large proportion of the forests of the Presidency. A more detailed reference to this will be found under sylviculture in Chapter III.

II.—GENERAL ADMINISTRATION.

(i) ALTERATION IN AREA.

5. There were 18,955 square miles of reserved forests in the Presidency when the year began. Further reservation increased this to a total of 18,993 square miles by the end of the year, the additions being chiefly in the two Godavaris and in South Mangalore. These total figures, it is important to note, include 3,343 square miles of ryots' forests which are under the Board of Revenue's control.

6. The area of reserved lands at the beginning of the year was 453 square miles. There was a net increase of 112 square miles during the year due to the preliminary notification of certain blocks under section 4 of the Forest Act in the Ganjam, Upper Godavari and Lower Godavari divisions, and to the notification under section 26 of the Forest Act, by Collectors, of grazing areas in Bellary, Anantapur, Cuddapah and Kurnool divisions for management by panchayats. The area at the end of the year was 565 square miles.

(ii) FOREST SETTLEMENT.

7. The area under settlement at the commencement of the year was 177 square miles, to which 87 square miles were added during the year. An area of 77 square miles was finally settled (including 8 square miles notified after the close of the year) leaving a balance of 187 square miles still to be settled. Settlement operations were in progress mainly in Upper and Lower Godavari, Central and South Salem, and South Mangalore.

8. The selection and demarcation of blocks for reservation in the southern zone of the Rampa Agency has been completed, and the proposal to select areas in the northern and more remote zone is under correspondence with the Agent. In Vizagapatam the preliminary demarcation of five blocks selected for reservation has been completed.

(iii) DEMARCATION.

9. Reserve boundaries were newly demarcated over a total length of 70 miles at a cost of Rs. 3,019. Out of a total length of 23,005 miles of artificial boundaries, 19,941 miles were kept in repair, of which 16,645 miles were maintained by subordinates free of cost or as part of fire protection operations, and the remaining 3,296 miles by paid labour at a cost of Rs. 7,596.

10. In Ganjam the preliminary demarcation of a block of 10 square miles selected for reservation under section 26 of the Forest Act has been completed.

In Ganjam twenty-five miles of frontier boundary was verified by the Extra Assistant Conservator. In Upper Godavari 42 miles were verified by the District Forest Officer. The existing narrow line was cleared and widened and cairns built over a length of 26 miles. In Tinnevelly, estate boundaries adjoining reserves were cleared over a length of three miles. In North Mangalore 43 miles of frontier boundary were cleared and in Wynaad 78 miles—39 miles by the Madras survey party and 39 miles by the forest staff. In South Mangalore 33 miles of frontier boundary were inspected—24 miles by the District Forest Officer jointly with an officer of the Mysore Darbar and the remaining nine miles by Range Officers.

(iv) SURVEY.

11. No areas were surveyed by the Survey of India during the year.

12. The Madras survey party have sent resurvey sketches of villages adjoining reserved forests in Lower Godavari and these are under verification by the District Forest Officer. It has completed the resurvey of the Tiruppattur, Attur, Salem and Rasipur taluks and has taken up the Harur taluk, and also completed the survey of areas assigned to planters on the Anamalais and of the disreserved blocks in Kollegal. The survey of the Kannoth range in Wynaad is in progress.

13. The survey of six square miles of sandal-bearing unreserves intended for reservation in North Salem has been carried out by an Extra Assistant Conservator.

14. The forest reference maps were kept up to date.

(v) ROADS AND COMMUNICATIONS.

15. No new works of cost exceeding Rs. 5,000 were executed.

The total expenditure on new works was Rs. 6,139 and on repairs Rs. 90,624 as against Rs. 39,025 and Rs. 1,14,708, respectively, incurred in the previous year.

16. Besides this, Rs. 7,687 were spent on the tram line in the Sribarikota range of the Nellore division (Rs. 7,000 on the purchase of two miles of track and Rs. 687 on repairs).

17. Forty miles of new roads, bridle paths, and inspection paths were constructed and 1,976 miles of existing ones were repaired, as against 40 miles and 2,075 miles, respectively, in the previous year. Owing to financial stringency the expenditure on new works and repairs was limited to cases of absolute necessity.

18. Forest roads have been kept in as good repair as funds have allowed.

(vi) BUILDINGS.

19. No new work of importance costing more than Rs. 5,000 was undertaken.

The total expenditure incurred on new works was Rs. 10,852 and on repairs Rs. 55,331 as against Rs. 20,375 and Rs. 58,586 in the previous year. The decrease was due to the curtailment of expenditure on account of financial stringency.

20. Forest buildings have been kept in as good repair as funds permitted.

(vii) OTHER WORKS.

21. The total amount spent on other works, mainly construction and repair of wells, etc., amounted to Rs. 5,914 as against Rs. 5,761 spent in the previous year.

Improvement of water-supply in grazing grounds.

22. A sum of Rs. 824 was spent on the improvement of the water-supply in grazing grounds in the Guntur, Nellore, East and South Kurnool and North and South Cuddapah divisions as against Rs. 1,043 in the previous year. In Guntur and Nellore the people were also permitted to repair existing tanks and wells in grazing grounds. No improvements were made in other divisions owing to financial stringency. A five-year programme for the improvement of the water supply in grazing grounds is under preparation in Kollegal.

(viii) FOREST ENGINEERING.

23. The Forest Engineer completed the construction of the Nedungayam road and two bridges—one of two spans and another of four spans—in the Nilambur division at a cost of about Rs. 1,15,000. It will now be possible for timber from the extensive natural forests of the Nilambur division to be carted straight to railhead, and be sent to markets east and west; before the bridge was built, floating to Beypore was alone possible; and that, only during a limited portion of the year. It is satisfactory to note that this considerable engineering project was accomplished departmentally.

24. The Forest Engineer was also engaged on the investigation of a road and slide project to tap the inaccessible Papikonda forests in the Lower Godavari division and has constructed a thousand feet of the slide at a cost of Rs. 604. He also investigated the possibilities of the construction of forest roads in the North and South Coimbatore divisions and of bridges in the Tinnevelly division. The scope of his activities is widening and he will be required to take up a systematic survey of means of extraction in important divisions as soon as financial conditions admit of it.

25. He was also in charge of the Chenat Nair assets and the portable saw mills under liquidation.

(ix) LIVESTOCK.

(a) Elephants.

26. The number of the elephants at the beginning of the year was 111 valued at Rs. 2,74,979. During the year one calf was born; nine elephants were sold and nine died or were destroyed. The number at the end of the year was 94 valued at Rs. 2,45,504.

27. Of the elephants that died several were in their prime and their loss was the more serious. The causes of death varied and there was no epidemic disease. There was more than the normal number of cases of mudsores amongst the elephants, notably in the Wynaad. This trouble which only occurs in the wettest time of the year caused temporary disability.

28. The training of elephants to drag by the mouth, as is done by all private elephants in Malabar, was started several years ago. All concerned, including the elephants, are in favour of this method of dragging. Twenty-six of our elephants are now trained to mouth dragging and in future all new captures are to be taught to drag by the mouth as well as in harness.

29. Elephant-capturing operations were suspended during the year on account of the restriction of timber-extraction and the difficulty experienced in disposing of surplus animals.

30. Damage by wild elephants continued in North Coimbatore, South Coimbatore, Madura, Kollegal and Nilambur divisions. In an attempt to mitigate it elephant-pits were dug on the borders of new plantations in Nilambur and but it is doubtful whether this had very much effect.

(b) Cattle.

31. There were thirty animals (buffaloes, bullocks and asses) valued at Rs. 2,268 at the beginning of the year. Two buffaloes were bought, one buffalo died and two buffaloes and two bulls were sold. At the end of the year there were 27 animals valued at Rs. 1,908.

(x) BREACHES OF THE FOREST ACT.

Cases.	Injury to forests by fire.		Unauthorized fellings.		Unauthorized grazing.		Other offences.		Total.	
	1931-32.	1932-33.	1931-32.	1932-33.	1931-32.	1932-33.	1931-32.	1932-33.	1931-32.	1932-33.
RESERVES.										
Cases taken to Court	13	19	4,933	5,118	1,449	1,259	228	354	6,623	6,750
Cases compounded	25	39	5,789	6,262	2,361	2,350	682	865	8,857	9,516
Cases undetected	1,023	1,212	300	344	12	1	7	7	1,342	1,564
Total ..	1,061	1,270	11,022	11,724	3,822	3,610	917	1,226	16,822	17,830
UNRESERVES.										
Cases taken to Court	6	133	1,323	2,300	34	466	85	147	1,448	3,046
Cases compounded	185	106	4,820	6,512	99	739	344	762	5,448	8,119
Cases undetected	24	227	122	247	..	..	12	2	158	476
Total ..	215	466	6,265	9,059	133	1,205	441	911	7,054	11,641
TOTAL OF RESERVES AND UNRESERVES.										
Cases taken to Court	19	152	6,256	7,418	1,483	1,725	313	501	8,071	9,796
Cases compounded	210	145	10,609	12,774	2,460	3,089	1,026	1,627	14,305	17,635
Cases undetected	1,047	1,439	422	591	12	1	19	9	1,500	2,040
Grand total ..	1,276	1,736	17,287	20,783	3,955	4,815	1,358	2,137	23,876	29,471

32. There has been an increase in all forms of offences reported except unauthorized grazing in Reserved forests. The increase is particularly noticeable under injury to forests by fire (20 per cent) and under other offences (34 per cent). It is always difficult to assign the correct causes for fluctuations in the number of offences reported. Generally speaking an increase usually implies greater vigilance on the part of the staff.

33. As the result of intensive concentration to this end by the District Forest Officers the grazing revenue has increased from Rs. 5,58,800 to Rs. 5,86,179. This is satisfactory, but there is no reason to suppose that the number of animals that actually grazed was many thousands more than in the previous year and the figures would appear to be a reflection upon the collections of the past year.

34. Of the 7,053 cases from reserved forests disposed of by Magistrates, in 3,838 cases the accused paid the compounding fees in Court and in 155 (or 5 per cent of the cases which actually went to trial) the accused were acquitted. Of offences from unreserves, 3 per cent of the cases actually taken to court resulted in acquittal. A source of trouble has always been those cases in which the accused refuses to pay compounding fee at first but agrees to do so in Court when prosecuted; an enquiry was made to ascertain whether the expenses of prosecution were usually demanded by Magistrates in addition to the compounding fees, and it was reported that generally this was done.

35. A sum of Rs. 1,68,629 was realized as compounding fees as against Rs. 1,66,387 in the previous year. The average compounding fee for each case was Rs. 10–11–7 and for each accused Rs. 5–6–6 as compared with Rs. 13–10–6 and Rs. 6–15–7, respectively, in the previous year.

36. The percentage of convictions in cases taken to court rose from 84 to 95.

37. There has been a general improvement in the proportion of cases investigated by rangers, but it is comparatively low in Nellore, Chittoor, Vellore, East and West, Central Salem, Kollegal and North Coimbatore. The proportion of cases investigated by District Forest Officers is very small in several divisions.

38. During the year 51 sandalwood cases were reported against 39 in the previous year—of these, 16 cases were compounded and 35 cases were prosecuted. District Forest Officers should bear in mind that sandalwood cases should not ordinarily be compounded but prosecuted. It is satisfactory to note that in South Kanara the Collector has taken suitable action against certain Kumakidars for illicit removal of sandalwood from Kumaki lands.

39. Rewards to the extent of Rs. 1,968 were distributed to forest subordinates, police officials, and private individuals who helped in the detection and prosecution of sandalwood cases and other serious offences.

40. In Vontimitta range of North Cuddapah division very extensive illicit grazing of goats and illicit removals of forest produce on a large scale were brought to notice. Forest and police officials who attempted

to prevent the commission of these offences were assaulted and eventually a forester was murdered. The Chief Conservator visited the district in July 1932 and after discussion with the Collector strengthened the protective staff and posted an Extra Assistant Conservator to enforce rigid protection; a rapid improvement took place, but all concerned must realize that continued vigilance will be necessary.

41. During the year Government sanctioned the introduction of Sandalwood Transit Rules into Bellary, Anantapur, Tinnevelly and Ramnad districts and approved the revision of the existing rules in Coimbatore, Chittoor and North Arcot districts. The introduction of Sandalwood Transit Rules into Madura and the Nilgiris districts is under consideration.

42. One hundred and twenty-one cases of illicit shooting, hunting and poaching were reported as against 89 in the previous year. This important branch of their duties receives better attention from the staff now than heretofore. Credit is due to those who have detected these cases, but it must be remembered that in the Presidency as a whole the number of cases reported represents only a small fraction of the number of offences committed. More personal enquiry by District Forest Officers into what is going on in their divisions is required and the organization of occasional secret patrols at night is a definite part of their duties. Some rewards have been given for good work in connexion with game preservation, and it is hoped that there will be no hesitation in recommending rewards in future when they are merited.

(xi) PROTECTION FROM FIRE.

43. Special fire protection was attempted over an area of 4,008 square miles. Of this area 181 square miles, or 4·52 per cent, were subsequently burnt, the corresponding figures for the previous year being 4,070 square miles, 341 square miles and 8·38 per cent. The bulk of the damage by fire was as usual in the Waltair circle, the percentage of area burnt being 10 against 17 in the preceding year. The largest single area burnt was 63 square miles in the Nugur range of the Upper Godavari division. The expenditure on special protection during the year was Rs. 26,578 or Rs. 6–10–1 per square mile as against Rs. 32,734 or Rs. 8–0–8 per square mile in the previous year.

44. A certain amount of early burning was carried out in all the divisions of the Bellary circle, in all the divisions of the Coimbatore circle except Tinnevelly, and in the Wynaad division of the Ootacamund circle. The total area dealt with under this system was 1,082 square miles as against 935 square miles in the previous year, the recorded expenditure being Rs. 3–4–2 per square mile against Rs. 4–6–11 in the previous year. Of the area early burnt, 9 square miles (or ·83 per cent) were reburnt a second time.

45. Many officers, including the Chief Conservator, dislike the so-called early burning, but there are certain localities where it has to be carried out either as a definite stimulant to natural regeneration or with a view to diminishing the chances of an holocaust taking place in the hot weather. One of the most interesting features of forest protection in

recent years is to be seen in the Mudumalai forests of the Nilgiri-Wynaad where, since early burning was stopped some seven years ago under the prescriptions of a revised working plan, which reverted to the old system of rigid fire-protection, a steady and marked improvement has taken place in the forest.

46. Rewards amounting to Rs. 2,990 as against Rs. 2,545 in the previous year were distributed to the Khonds in Ganjam, to the Koyas and Reddis in Upper Godavari, to villagers in the Peddapur range in Lower Godavari and to the Malayalis in the Javadi Hills of North Arcot for their assistance. In the case of Peddapur, part of the reward was withheld for unsuccessful protection. The Koyas and Reddis of the Polavaram Agency in Lower Godavari have been persistently indifferent and were therefore given no rewards, as too the hillmen of Lower Godavari.

(xii) PROTECTION AGAINST INJURIES FROM NATURAL CAUSES.

47. In the Nilambur division the investigation into teak defoliation which mainly consisted of the mapping of defoliated areas has been discontinued as sufficient data has already been collected. Under the instructions of the Forest Entomologist, Dehra Dun, it is proposed to ascertain the loss of increment in teak due to defoliation by periodical measurements of defoliated trees in sample plots, and also to ascertain whether the incidence of defoliation is greater during periods of active growth than in those of comparative stagnation.

48. In Vizagapatam an insect attacking sal has been identified by the Forest Research Institute, Dehra Dun, and remedial measures suggested by it were adopted to prevent its spread. Remedial measures were undertaken against the spread of caterpillars which began to defoliate *Acrocarpus fraxinifolius* plants introduced in the selection felling areas in the Silent Valley in Palghat. In East Kurnool some sandal seedlings were killed by an insect identified by the Forest Entomologist as *Zeuzera coffeæ* and remedial measures were undertaken on his advice.

49. The cochineal insect has made rapid progress in destroying prickly-pear and has cleared an area of over 333 square miles. In this connexion the attention of Government is invited to the report submitted to them in June last, in which it was pointed out that the wholesale destruction of prickly-pear, which is now beyond our powers of control, cannot perhaps be considered an unmixed blessing.

50. Lantana is a source of embarrassment in the Salem circle. In North Salem, attempts are being made to destroy it by spraying chemicals, and by planting quick-growing tree species in lines. In Wynaad, lantana was cleared from plantations and around buildings. In South Coimbatore, lantana was uprooted partly by paid labour and partly by elephants. In the Nilgiris it was uprooted by elephants on roadsides and in plantations. In Tinnevelly, lantana and *Strobilanthes* were cleared by coupe contractors. In the Nilgiris, Eupatorium continued to spread on the plateau and the grazing grounds. Loranthus

continued to damage large *Acacia melanoxylon* trees on the plateau. Severe frost did considerable damage to the Eucalyptus plants in some reserves.

51. Spike prevails in North and South Salem, Kollegal and North Coimbatore and the Sigur range of the Nilgiris. The investigation into this disease (bio-chemical and entomological) was continued during the year. But the question of continuing it further is under consideration.

52. Bison did much damage to the *Gmelina* plantation in Rambha Reserved Forest in Ganjam and rats to teak seedlings in Lower Godavari. Wild elephants caused harm to sandal, teak and vengai (*Pterocarpus marsupium*) in North Coimbatore, and to teak plantations in South Coimbatore and Madura, to the regeneration in Palghat, and particularly to the young plantations in Amarampalam range of Nilambur division. In Wynaad, bison and sambhur did harm to the young teak and in Nilambur monkeys, pigs and deer damaged the young plantations.

(xiii) FOREST PANCHAYATS.

53. The total area of ryots' forests is 3,343 square miles of which forest panchayats have been formed for 3,278 square miles under the control of the Board of Revenue, Land Revenue and Settlement. The remaining 65 square miles are under the control of the Forest department having been retransferred to it owing to inability to form panchayat for the forests at present. The Board of Revenue publishes an annual report on the working of forest panchayats.

54. The forest village system was in operation in the North Mangalore division, where there were three panchayats, but it must be recorded that they abused their concessions and failed to carry out their obligations.

55. The hill village system (a form of the forest village system devised in the past to suit the Malayalis) was in operation in the East and West Vellore and Central Salem divisions. The Malayalis of East Vellore have done little, if anything, to keep their side of the bargain in the matter of sandalwood protection and the Conservator is taking measures to prevent their negligence in future.

(xiv) FOREST COLLEGE.

56. The strength of the 1930–32 senior division was 19, including two Madras private students admitted at the concessional rate of Rupees 500 for the whole course. Of these, 16 students secured higher standard certificates, and 3 lower standard certificates. Nobody obtained honours. There were no Madras Government students.

57. The students of the 1931–33 course also numbered 19. Of these, one was a private student from Madras admitted at the concessional rate of tuition fees. The others were—5 from Bombay, 5 from Central Provinces, 2 from Hyderabad, 2 from Travancore and 4 from Central India States. There were no Madras Government students. One student, deputed by another Government was found cribbing in

the final examination and was dismissed from the college. One student obtained honours and all the remaining seventeen obtained higher standard certificates.

58. Twenty-nine students were admitted to the 1932–34 course. Of these, twenty-one are Madras Government students recruited from the rank of Foresters and the remaining eight are, one from Coorg, two from Bombay, two from Hyderabad, and one from Bhopal, and two private students of Madras admitted at the reduced tuition fee. Sixteen Probationary Foresters were recruited in November 1932 and joined the college in August last after completing their preliminary practical training under District Forest Officers.

59. The post of an instructor, which had been kept vacant, has been abolished permanently.

60. The net cost of the maintenance of the college was Rs. 41,742 as against Rs. 13,544 in the previous year. The increase in the net cost is mainly due to a decrease in revenue of about Rs. 17,000 owing to the reduction in the number of students paying tuition fees in the 1932–34 course from 19 to 8, and to the increase in expenditure of about Rs. 9,000 on account of the payment of pay and travelling allowance to the 21 Madras Government students, while there was no such expenditure in 1931–32.

61. The training followed the usual lines.

62. One Madras Government student of the 1932–34 course died following an operation after joining the college. Generally the health of the students both at the college and in camp was fairly satisfactory.

(xv) VERNACULAR TRAINING SCHOOLS.

63. No vernacular training schools were held during the year, as a measure of economy.

III.—SYLVICULTURE.

(1) SYSTEMS OF MANAGEMENT.

64. The following statement indicates the areas subjected to various methods of treatment :—

A. Timber Forests.

	SQ. MLS.
Clear felling	3·41
Selection felling	63·96
Improvement felling	6·15

B. Fuel Forests.

Simple coppice	84·63
Coppice with standards	7·24

In addition to the above, sandalwood, almost entirely confined to dead trees, was harvested over areas amounting in the aggregate to 387·23 square miles, whilst the total area in which bamboo working took place during the year was 1,340·42 square miles.

(2) GENERAL PROGRESS OF REGENERATION AND AFFORESTATION.

A. Mainly Natural.

(i) Concentrated.

65. The progress of regeneration under this head was normal. The system of managing the sal forests in Ganjam relies upon natural regeneration and the same applies to all the coppice fellings in the fuel forests.

(ii) Not concentrated.

66. Under this head there is nothing exceptional to record.

B. Mainly Artificial.

67. In the case of the timber forests the area regenerated was somewhat less than normal owing to the fact that timber felling was restricted on account of the poor demand for timber during the last year or two. Special care was taken, however, to see that some concentrated regeneration work was done in each division where it is practised, since experience shows that it is most necessary to avoid the risk of the staff and labour losing the art of obtaining a full stocking with certainty in the first year, which they do very quickly, if they cease to practise it.

68. The raising of fully stocked teak plantations in our main timber divisions after clear felling and burning has become a routine operation and efforts are now concentrated upon studying how best to obtain those extra few inches of height growth during the earliest days of a plantation's life which make such a difference later on. Research has shown that the planting of teak stumps several weeks before the burst of the monsoon gives the best results and a further indication is that it is doubtful whether the expense of digging pits in order that the stumps may be planted in loose soil is necessary since excellent results are obtained by simply making a hole for the stump with a crow-bar.

69. Most promising results have been obtained during the last few years from the method adopted for regenerating gaps in deciduous timber forests after selection fellings. Where a gap of sufficient size to allow the entrance of direct sunlight is formed by the felling of a big tree top ends and brushwood are burnt in the middle of the gap and a few teak stumps are planted. Owing to the sterilizing effect of the burn, weed growth is not excessive for the first year or even longer, and the theory is that one forest guard has the special duty of seeing that two or three plants in the middle of each gap develop into saplings. When this has occurred no further sylvicultural attention of any kind is contemplated, and the fairly safe assumption is that by the expenditure of a sum of money, which is a very small fraction of the amount

derived from selling the mature trees felled, which Nature has given us, our successors will find that there is rather more teak in the forest when they come round to work it, than there was when we did the original selection fellings. To ride on an elephant round some of the selection coupes in Wynaad division, which have been treated on this system during the last three years, is as interesting and encouraging a proceeding as any sylviculturist could desire. The idea is, of course, not a new one, and there are places in Wynaad, where one may come across the results of similar work on a small scale, having been done by our predecessors a good many years ago. Now the system has been made a definite prescription of modern working plans.

70. A similar system, but without the burning, to that described in the last paragraph, is also in vogue in our evergreen forests, where light selection fellings, largely of *Mesua ferrea* for sleepers, are carried out. We still have to find the perfect species for stocking gaps in these evergreen forests. We are no longer so hopeful of the ultimate success of *Acrocarpus fraxinifolius* as we once were; we are now trying Mahogany amongst other things. Experience shows, however, that there is sufficient natural regeneration in and around the comparatively small gaps caused by the selection fellings to set our minds at rest, and there is no fear whatever of the essential character of these protection forests being changed by removing two or three mature trees per acre.

71. The artificial regeneration of several timber species other than teak on soils unsuited to the latter no longer presents the difficulty that it once did. We now have very little difficulty in raising *Terminalia tomentosa* from seed in the more swampy parts of our clearings. Rosewood grows well from stumps, as also from seed, and *Iagerstræmia lanceolata*, Mahogany and *Pterocarpus marsupium*, to say nothing of *Anacardium occidentale*, the cashew or Promotion nut of our dinner tables, which promises to produce a quickly grown fuel as well as a valuable crop of nuts have all been raised in recent years, notably in Nilambur division. *Albizzia odoratissima* has been raised successfully from seed along with field crops in the Bolampatti forests of Palghat division, and on suitable laterite soils *Xylia xylocarpa* can be grown from seed, though the natural regeneration of this species is so profuse on suitable soils that there is no need to supplement it artificially. Much knowledge has been gained about the artificial regeneration of sandalwood and great success has been achieved, notably near Teppakadu in the Nilgiris-Wynaad by sowing sandal along with dhall (*Gajanus indicus*), which acts as a nurse and temporary host, along with field crops of ragi. Having said so much, it is now necessary to point out that it would be unwise to be too optimistic about the ultimate fate of the recent sandalwood plantations round Teppakadu. The Chief Conservator is possibly one of the few officers that have seen the admirable results of the last three years who thinks it very possible, not to say probable, that the trees will start to go back and tend to become stag-headed before they have produced any appreciable amount of heartwood. The Mysore forests to the north and the forests round Masinigudi to the east are full of natural sandalwood and it seems a poor compliment to Nature to suppose that she would have been so improvident as not

to put any sandalwood in the small intervening area of greater rainfall and heavier forest, if she had reason to suppose that it would flourish there to maturity.

72. As regards the fuel forests in the drier localities the last two or three years have seen the initiation of an improved method of treatment, which is perhaps the most important development in the forest department of recent years. When a fuel coupe is felled, a large number of the stools send up coppice shoots but quite an appreciable number fail to do so. Natural regeneration from seed is problematical in many of the drier coupes, and it has always been a question as to whether many of the worked coupes were not actually deteriorating and whether the yield in the second and subsequent rotations would not fall off progressively. The method which is now adopted is to collect the brushwood and felling refuse into suitable heaps and to burn it. The resulting ash is worked into the soil and tree seeds are sown. Much yet remains to be learnt, but that progress is being made may be judged by the fact, that in one of the driest divisions one of the District Forest Officers can raise plants with such certainty that he now sows his seed in such a way that one species, which suffers greatly from browsing, comes up surrounded by a belt composed of another species, Dolichandrone crispa, which animals will not touch.

73. These recent developments in the artificial regeneration of dry fuel forests are already having a most beneficial effect upon the whole morale of the department. In the old days inspections in these dry forests involved chiefly destructive criticism and adverse comments on the state of protection. A subordinate's main object was to divert an inspecting officer's attention from what he had omitted to do. Nowadays, on the other hand, one finds subordinates anxious to show what they have achieved and the fact that in the future it will be possible to stimulate a real sylvicultural interest in the raising of crops in dry fuel coupes and not infrequently to mete out praise instead of blame must inevitably be a most excellent thing for all concerned.

C. Afforestation.

74. In the shifting sands of Kudiramoliteri Reserve in Tinnevelly the progress of afforestation is reported to be slow. Large quantities of palmyra seed have been sown in recent years. A fair percentage of germination is reported, but the species is one which grows extremely slowly, and it strikes one as a peculiar species to rely upon. Other species have, however, been tried but with little success. No doubt the new working plan, which is nearing completion, will review the whole situation.

75. The planting of casuarina near the seashore in Lower Godavari and Nellore continued successfully.

(3) TENDING OF THE GROWING STOCK IN AREAS NOT UNDER CONCENTRATED REGENERATION.

76. Improvement in the organization for the systematic cutting of climbers in our natural forests is required. Admittedly a good deal of climber cutting is done but the fact remains that inspections especially

in the more remote localities, disclose the fact that over vast areas the leaves of climbers constitute far too large a proportion of the canopy, to the very serious detriment of the timber trees. Brief statements in some circle reports to the effect that climbers were cut free of charge by subordinates do not carry much conviction. District Forest Officers who read this will know whether or not their organization for climber cutting and for check of the work is capable of improvement or not.

77. Owing to shortage of funds the special tending of some sandalwood areas did not receive as much attention as is desirable. It is becoming increasingly apparent that sandalwood trees, like human beings, are much less subject to disease when their conditions of life are healthy. It may easily prove that skilful sylviculture will play a large part in our fight against spike disease, and no pains should be spared to see that the tending of sandalwood receives adequate attention.

(4) GENERAL.

78. Within quite recent times the old established ideas of Forest Officers throughout the world have been somewhat shaken by the discovery of what an important part root competition plays in the development of tree crops. For years we have been striving to encourage the undergrowth in teak plantations and to get a mixture of other species amongst our teak and we have taken it for granted that the shade and sometimes drip from the surrounding high forest were the sole reasons why the plants on the edges of a plantation usually show poor growth. Experiments in other parts of the world are now tending to show that there is intensive competition underground amongst the roots of trees and plants and there is no doubt that in Madras, as elsewhere, sylvicultural research must pay most serious attention to discovering whether our present policy of aiming at a mixture of species amongst our teak is a wise one.

IV.—WORKING PLANS.

79. At the commencement of the year sanctioned working plans or schemes were in existence for 9,109 sq. miles. During the year working plans were sanctioned for an area of 1,493 sq. miles. Thus the area covered by sanctioned working plans at the close of the year was 10,602 sq. miles.

80. Working plans were either under preparation or awaiting sanction for 2,719 sq. miles leaving an area of 2,894 sq. miles (excluding ryots forests) which are not covered by working plans.

81. The working plans branch have completed the plans for the Palghat forests, the Wynaad Ghat forests and the North Coimbatore forests and the Nallamalai forests of West Kurnool. They were engaged on the preparation of working plans for the Kollegal, Lower Godavari, Tinnevelly and Madura divisions and for the South Coimbatore division excluding the Mount Stuart forests (for which a revised working plan was recently sanctioned). Revision of time-expired plans will be taken up as soon as the work on hand is completed. It has to be remembered

that, according to world-wide forestry practice, our working plans are only made to cover a limited period, usually ten years, at present. The experience gained and data collected during each period will result in more intensive and exact management after each revision with corresponding improvement to the forests.

82. The following plans prepared under the supervision of the territorial Conservators were sanctioned during the year :—

(i) Revised working plan for the Hair Comb Wood Working Circle of the Chittoor division;

(ii) Tentative Working Plan for the South Cuddapah division.

83. The following working plans also prepared by the territorial staff were completed but have not yet been sanctioned :—

(i) Revised Working Plan for the Berhampur Range, Ganjam division.

(ii) Working Plan for the Guntur Uplands.

(iii) Working Plan for the Sriharikota Range.

(iv) Revised Working Plan for the Odugathur Range, East Vellore division.

(v) Working Scheme for the extraction of sleepers from unreserves in South Mangalore.

84. Working Plans for the following areas are under preparation :—

(i) Consolidated Working Plan for the Vizagapatam division.

(ii) Working Plan for the Repalle Range of the Guntur division.

(iii) Working Plan Scheme for the extraction of sleepers from unreserves in North Mangalore.

85. Control records are, as usual, scrutinized by both the territorial and the Working Plan Conservators. The latter submits periodical reviews to the Chief Conservator of Forests.

V.—UTILIZATION.

(i) SUPPLY OF PRODUCE.

(a) Timber.

86. The total output of timber was 59,600 tons or about 7 per cent less than that of the previous year. The details are—

	By Government.		By purchasers.	
	1932-33.	1931-32.	1932-33.	1931-32.
(1)	(2)	(3)	(4)	(5)
	TONS.	TONS.	TONS.	TONS.
Reserved forests, leased forests and reserved lands	17,920	20,740	20,260	17,900
Unreserves	5,360	2,500	11,980	18,240
Total ..	23,280	23,240	32,240	36,140

	By free grantees.		By right holders.		Total.	
	1932-33.	1931-32.	1932-33.	1931-32.	1932-33.	1931-32.
	(6)	(7)	(8)	(9)	(10)	(11)
	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.
Reserved forests, leased forests and reserved lands	860	560	600	800	39,640	40,000
Unreserves	2,340	2,680	280	320	19,960	23,740
Total ..	3,200	3,240	880	1,120	59,600	63,740

87. There was a total decrease of 2,820 tons under removals from reserved forests by Government agency. This was mainly due to less extraction of sandalwood and breakpoles in North Coimbatore division, to restriction of fellings in South Coimbatore and in Nilambur for want of demand. But there was an increase of 2,860 tons under removals from unreserves mainly due to larger extraction of sleepers from the unreserves of North and South Mangalore. There was an increase of 2,360 tons under removals from reserves by purchasers. The increase was spread over South Mangalore, Palghat, the Nilgiris and South Coimbatore where a larger quantity was extracted from the Ulandy valley forests by a contractor.

88. The quantity of timber departmentally collected and remaining undisposed of at the end of the year was 2,284,000 cubic feet as against 1,247,000 cubic feet in the previous year. The increased stock on hand was due to the slump in the market.

89. A statement showing the specieswar details of timber (in thousands of cubic feet of log) removed from reserved forests by departmental agency is enclosed as a new appendix to Form No. 35.

(b) *Fuel.*

90. Two hundred and thirty-three thousand five hundred and seventy-five tons of fuel were extracted from reserved and leased forests of which 12,375 tons were removed by departmental agency and 219,212 tons by purchasers as against 219,562, 12,700 and 205,412 tons respectively, in the previous year. There was a net decrease of 325 tons under removal by Government agency, while there was an increase of 14,338 tons (13,800 plus 538) under removals by purchasers and free grantees. The decrease under removal by Government agency was mainly because in the previous year there was an adventitious increase in Bellary Circle in the quantity of fuel left unremoved by the contractors and confiscated to Government. The increase of 13,800 tons under removals by purchasers was due to the sale of a larger number of coupes under the Revised Working Plans in North and South Coimbatore divisions, to the increased yield per acre in North Mangalore and Palghat divisions, to the sale of top ends and branchwood of trees blown down by a cyclone in the plantations in the Nilambur division and to the formation of larger coupes in South Mangalore.

91. The outturn from unreserves was 17,150 tons as against 15,950 tons in the previous year.

(c) Bamboos.

92. The value of bamboos removed by all agencies was Rs. 3·83 lakhs as against 3·44 lakhs in the previous year. Bamboo coupes were generally leased out to contractors except in Upper and Lower Godavari, where the produce was sold by the issue of permits. The increase in revenue was mainly due to larger removals on permits in Rampa, to competition among bidders in South Kurnool and to better grouping of coupes in Kollegal and North Coimbatore under the new revised Working Plans resulting in larger yield.

93. Investigations made during the year have established the suitability of Mettur for the installations of a paper mill capable of producing 8,000 tons of paper annually, from the bamboos available within economic reach in the reserved forests. Detailed information has been incorporated in a special pamphlet on the Industrial Potentialities of Mettur, published by the Department of Industries. A project for the establishment of a paper mill would be a sound and promising one, worthy of private enterprise.

(d) Sandalwood.

94. Six hundred and forty-eight tons of sandalwood were sold for Rs. 5,94,649 as against 672 tons for Rs. 6,12,802 in the previous year. The average price realized was Rs. 918 per ton as against Rs. 912 in the previous year. The result of sale proved to be much more favourable than the depressed state of the trade promised at first, and this was entirely due to the sagacity and tact displayed by the Conservator, Coimbatore Circle, Rao Bahadur K. R. Venkataramana Ayyar in his negotiations with the sandalwood merchants. The market for this article of luxury is uncertain, as it is considerably affected by demand from foreign countries, and the competition of sandalwood substitutes in those countries and in India. Attempts made to establish direct contact with consumers in Europe have not materialized. A proposal was submitted to Government for levying a higher protective duty on imported sandalwood substitutes, which compete with the indigenous genuine wood. The proposal was supported by Government, but the Government of India declined to approve of it in the interests of export trade, and they are considering simple means of enabling the public to distinguish between the genuine wood and its substitutes.

95. In spite of continued efforts made to popularize the retail sale of sandalwood in small quantities sales have been poor.

96. As the value of sandalwood particularly in the foreign markets is largely proportionate on its oil-contents, samples of various parts of the tree extracted from the various localities were sent both to the Forest Research Institute, Dehra Dun, and to the Indian Institute of Science, Bangalore, for analysis. The former has sent the results while the latter has furnished the results in respect of some of the samples and is engaged still on the others.

(e) Grazing.

97. 12·59 per cent of the forests managed by the department were closed to grazing, 11·24 per cent throughout the year and

1·35 per cent during part of the year. Grazing permits were issued for 1,452,292 animals as against 1,409,175 in the previous year. The increase was due to greater efforts made by District Forest Officers to prevent illicit grazing. The revenue realized was Rs. 5,86,179 as against Rs. 5,58,800 in 1931–32. One hundred and twenty-seven thousand seven hundred and twenty-three animals grazed free of charge as against 92,515 in the preceding year. There was a marked increase of 35,208 animals according to reports received but whether the stimulus which resulted in increased collection of grazing fees also resulted in a more careful computation of the number of animals which were allowed to graze without payment or whether the apparent increase is a real one is not recorded. The revenue foregone by allowing free grazing and grazing at concessional rates was Rs. 54,776 against Rs. 46,014 in the previous year.

98. In the panchayat forests permits were issued for 781,508 animals as against 895,450 in the previous year. One thousand seven hundred and twenty-two animals were allowed free grazing as against 1,892 in the preceding year.

99. As a measure of retrenchment the posts of permit issuing officers were abolished and the work of selling grazing permits was entrusted to foresters, but proposals for the revival of these posts are under the consideration of Government.

100. The average incidence of grazing in the reserved forests under the control of the department is 5·7 acres per animal as compared with 5·9 in the previous year, the incidence being as low as 3·52 in Central Salem, 3·66 in Parlakimedi Maliahs, 3·87 in Guntur, 3·99 in Lower Godavari, 4·25 in Vellore East, 4·39 in Upper Godavari, 4·40 in South Salem and 5·1 in the Nilgiris. These figures are of very little significance the fact being that in a great many places the very forests which it is most desirable to protect, as being the source of the fuel and small timber requirements of the people, are very heavily overgrazed, whereas unworked forests of the interior are often so remote as to attract no grazing at all.

101. Under the previous orders of Government a single permit used to be valid for a range. But during the year under review they ordered that a single permit valid for a whole range on payment of the grazing fee fixed for that range, should be good for the whole division on payment of the highest fee prevailing in that division.

102. Under instructions from Government a report on the question of revising the grazing and penning fees was submitted to Government who have ordered that the question should be deferred for the present in view of the existing agricultural depression.

103. A detailed report on the working of the kancha system in Nellore was submitted to Government with a recommendation for its retention with certain modifications. Government have approved these proposals.

104. A portion of the Guttikonda Reserved Forest in Guntur district was handed over to the Agricultural department to provide concentrated

grazing for breeding cattle. The issue of grazing and penning permits was retained in the hands of the Forest department, and is reported to have worked satisfactorily.

105. In order to introduce better strains of grass in grazing areas, experiments were conducted with two superior species, viz., kikiyu and kolukkattai, in Guntur, Anantapur, South Kurnool, Central Salem, North Coimbatore, Kollegal, Madura, Tinnevelly and the Nilgiri divisions with varying degrees of success according to the extent of timely rain in the areas concerned. The kikiyu grass did not come up well in Guntur, Central Salem but it grows well in the Nilgiris.

(f) Minor Forest Produce.

106. The revenue derived from minor produce amounted to Rs. 5,67,473 as against Rs. 6,02,529 in the previous year. The decrease in revenue was mainly due to the low rates realized for tangedu (Cassia auriculata) bark in the Anantapur division. The fall in price of this product, as well as of other indigenous tans, is partly due to the economic depression but even more to the increasing importations of wattle bark for tanning from South Africa.

107. The right to collect minor produce is generally leased to contractors except in the Sriharikota Range of the Nellore division and in the Nilgiris, where the produce is collected departmentally.

108. As the market for lac was exceptionally dull, its cultivation was stopped in Palghat, Central Salem and North Coimbatore. It is however continued on a limited scale in North Salem and Madura in order to preserve and develop the existing broods. Experiments are in progress on the economic manufacture of shellac sealing wax and polish.

109. *Nux vomica.*—Experiments with seeds collected from both the east and west coasts of the Presidency were conducted by the Forest Research Institute in 1931 and showed that the Strychinine contents do not deteriorate under varying storage conditions.

The demand for nux vomica seeds has dwindled temporarily and the price has dropped.

(g) Removal of Forest Produce by free grantees and right holders.

110. The total estimated value of forest produce removed by free grantees and right holders amounted to Rs. 83,906 against Rs. 88,960 in the previous year. These figures do not take into account the considerable, although unassessable, value of forest produce removed in consequence of the special concessions allowed in the South Kanara district. Most of the free grants were made for the reconstruction of houses destroyed by fire. The principle that free grants should be made as far as possible from unreserves, and from reserves only when there are no unreserves close by, has generally been followed in sanctioning free grants.

(h) General.

111. Generally the Forest department supplied adequately the domestic and agricultural requirements of the people. Free removal of grass in headloads was allowed in most of the divisions. Free grants

of building materials were made to enable the recipients to rebuild their houses destroyed by fire. The requirements of the people in fuel, bamboos and small timber were fairly well catered for by the coupe contractors, who were required to supply them at the edge of coupes at rates not exceeding the reasonable maximum rates fixed by the District Forest Officers for each division, and this arrangement was notified to the people. Agricultural implement coupes were opened in Kollegal and North Coimbatore, but the people did not take advantage of the arrangement, and in South Coimbatore, where they were worked on the controlled permit system.

112. Cartmaking materials—Kolmarams and chattams—were supplied in Palghat and spokes and felloes in South Kurnool and South Coimbatore. Brake poles were supplied at roadside on ghat roads in North and South Coimbatore and Madura for the facility of carts passing through the forests.

113. The removal of manure leaf has been allowed in divisions which were unable to do without it. The demand still continues to be heavy in some divisions, and in these the forests have been damaged very seriously. It has been the recognized policy of Government gradually to wean the ryots from the habit of depending on the forests for this supply and to encourage them to grow their requirements on their own lands or to use other kinds of manure. One way of making the ryots grow their own requirements is by prohibiting removals from the forest. The ryots of Madura, who previously depended largely on the forests for their manure leaf supply, have learned to grow it themselves as a result of prohibition.

114. A detailed report on the subject of manure leaf removal from departmental forests, reviewing the present position and indicating the future policy was recently submitted to Government, and their orders are awaited.

(ii) COMMERCIAL UNDERTAKINGS.

115. The commercial accounting maintained for certain forest divisions and parts of divisions was discontinued from 1st April 1932.

116. All the five saw mills—the four portable ones at Parappa, Chedleth, Beypore and Top Slip and the mill at Olavakkot—were sold and the sale amounts completely realized. The mill buildings, too, were disposed of. There remained at the close of the year, a stock of saw mill and tractor spares, tools, etc., at the Central Stores, Olavakkot and the disposal of these is in process.

Forest Utilization Division.

117. The Forest Utilization Officer continued to organize and conduct sales of logs, sawn scantlings and sleepers.

118. The turnover of the division, for the year, was Rs. 9,59,521, against Rs. 7,94,020 in the previous year. It is gratifying to note this increase in spite of the continuance of the slump in prices.

119. The liquidation of the old stock of mill sawn scantlings cut before the mills were closed three years ago was continued. Eight thousand one hundred and thirty cubic feet were sold leaving at the end of the year a balance of 2,332 cubic feet. The scantlings were all deteriorated junglewoods—the residue left after the selection of all popular sizes. They naturally fetched low rates. Efforts are being made to dispose of the small balance still unsold.

120. *Overseas trade.*—No consignment was made during the year. The balance of 2,104 cubic feet of laurel logs (*Terminalia tomentosa*), consigned in previous years but left unsold with Messrs. Peirce Leslie and Company, London, was disposed of at the best rate procurable.

The new policy of sending logs only against definite orders was continued. The demand for good quality laurel logs in the overseas market showed definite improvement over the previous year and through the efforts of the Timber Adviser to the High Commissioner for India. Two thousand eight hundred and seventy-four cubic feet of laurel logs were sold to a London firm. Further orders are materializing.

121. *Logs.*—Sales of logs from the four principal sale depots of the department—at Pollachi, Beypore, Mysore and Nanjangud—aggregated 515,349 cubic feet against 296,620 cubic feet in the previous year. The striking increase in the quantity sold was due to the sale of the entire accumulated stock of teak logs in the Mysore and Nanjangud depots on long-term contracts to private merchants. An all round average rate of Rs. 1–2–3 per cubic foot was realized against Rs. 1–4–5 for the previous year.

122. *Sleepers.*—The Forest Utilization Officer continued to pass sleepers for the railways. Thirty-nine thousand two hundred and thirty-six broad gauge and 27,026 metre gauge sleepers of hardwood species—*Mesua ferra, Hopea parviflora and Xylia xylocarpa*—were supplied to the railways. The sleepers delivered up to the end of December 1932 were paid for, at the previous years' rates of Rs. 7–12–0 per broad gauge, and Rs. 3–2–0 per metre gauge while for the subsequent supply the rates were Rs. 5–2–6 and Rs. 2–5–0, respectively. The drastic reduction in rates was chiefly due to the low rates which private contractors had tendered for their supply; the general slump in the timber trade has lowered sleeper prices throughout India. The low rates paid by the railways have resulted in the department's profits being greatly reduced and what used to be a paying business in the past is much less so now, with the result that certain important centres of production ceased to be remunerative and working in them had to be stopped.

123. The Forest Utilization Officer succeeded in securing from the South Indian Railway a contract for supplying, through the agency of a contractor, special sized teak-sleepers for the two years commencing from 1st April 1933. Fifty-one tons of Nilambur teak were supplied to the South Indian Railway and seventy-five tons of Wynaad teak to the Madras and Southern Mahratta Railway. Three thousand five hundred and sixty-four cubic feet of Grewia tiliaefolia were supplied to the Gun Carriage Factory at Jubbalpore.

124. The market for spokes and felloes continued to be dull and with great difficulty 143 sets were disposed of.

The markets in Rajahmundry and in several southern districts were investigated.

125. Specimens of suitable softwoods were supplied to a Pencil Factory for trial.

126. As in the previous year, the Forest Utilization Officer arranged for the supply of suitable specimens of timbers for test at the Forest Research Institute, Dehra Dun. He also made a joint inspection with the representatives of railways, of the untreated sleepers of Pœciloneuron indicum laid in the line experimentally.

127. In the Kurnool South division, 14,770 cubic feet of softwood species were extracted departmentally and sold at a profit to slate-frame makers of Markapur. In Chittoor, timber was supplied to the local hair-comb industry.

VI.—FINANCE.

128. The total revenue realized during the year amounted to 47·38 lakhs, the expenditure being 37·89 lakhs as against 42·55 lakhs (including the results of Government Commercial undertakings) and 39·87 lakhs respectively in the previous year. The year under review thus showed an increase of revenue by 4·83 lakhs and a decrease of expenditure by 1·98 lakhs.

129. Taking the year under review alone into consideration the surplus of receipts over expenditure was 9·49 lakhs.

130. There was an increase of revenue from sandalwood by 0·74 lakh, a balance of the revenue relating to the previous year and also part of the current year's revenue being realized. The revenue from timber removed by Government Agency increased by 6·97 lakhs mainly due to the realization of the outstandings of the previous year relating to the sale of scantlings and to the adjustment of the value of sleepers supplied to the railways in 1931–32. Revenue from produce removed by consumers and purchasers, except under firewood and charcoal, increased by 1·35 lakhs mainly due to a greater quantity of timber being sold to a contractor in the Ulandy valley forests in the South Coimbatore division. As regards firewood and charcoal removed by purchasers, there was a fall in revenue amounting to 0·90 lakh generally due to fall in prices and non-sale of fuel coupes and to the change of period of lease from the calendar year to the official year in Tinnevelly.

131. As mentioned the total expenditure decreased by 1·98 lakhs when compared with the previous year. The decrease was mainly due to (1) the emergency cut in salaries having been in force throughout the year in 1932–33 as against only three months in the previous year, (2) the restricted expenditure on capital works as a measure of economy, (3) the treatment of the sale-proceeds of the saw mills at Chedleth and Parappa as abatement of expenditure under " 52. A. Stores " and (4) the credit afforded under " 52.A.g. Investment in Government

Commercial undertakings—on account of the balance of capital expenditure on Forest Commercial undertakings on 1st April 1932 being written back to revenue.

132. The following trading account exhibits the financial position of the department for the year and shows a net profit of 4·71 lakhs. Interest charges are not actually incurred and the figure of outstanding revenue for the year under report is not strictly correct as, although sales had been effected, a considerable part of the sale amount for sandal did not fall due until after the close of the year. The financial position is thus better than that disclosed by the account. No credit is taken for free grants or grants at concessional rates for grazing and other produce; the amount so foregone amounted to Rs. 1,38,682.

I. Trading Account.

	LAKHS. RS.		LAKHS. RS.
Value of timber, etc., in depots on 31st March 1932.	6·35	Value of timber, etc., in depots on 1st April 1933.	3·11
plus * ..	0·27	Value of tools and plant on 1st April 1933.	7·32
Value of tools and plant on 31st March 1932.	9·10	Revenue outstanding on 1st April 1933.	7·99
Revenue outstanding on 31st March 1932.	8·64	Revenue of the year including 0·76 from the commercial concerns.	47·38
Working expenditure of the year (excluding capital expenditure).	36·22	Good debts (advances) on 1st April 1933.	0·16
Good debts (advances) on 31st March 1932.	0·17		
Gross profit	5·21		
Total ..	65·96	Total ..	65·96

* Added owing to revaluation.

II. Interest.

(1) Capital expenditure up to the end of 1931–32 (excluding commercial concerns)	39·52
Capital expenditure during 1932–33	2·34
Total ..	41·86
(2) Interest on capital expenditure of Rs. 2·34 lakhs during 1932–33 at 5·48 per cent	0·13

III. Depreciation.

(3) Depreciation on tools and plant at 5 per cent ..	0·37

IV. Profit and Loss Account.

Gross profit as per table I	5·21
Deduct interest and depreciation (0·13 plus 0·37) ..	0·50
Net profit ..	4·71

VII.—GENERAL.

133. As usual the Forest department looked after the hillmen and jungle tribes dwelling in the forests. They were granted rent free leases of land for cultivation, they were allowed the privilege of free grazing or grazing at concessional rates and the free use of forest produce, in return for which they were required to protect the forests. They were also granted rewards for successful fire protection. They were employed in departmental operations for which they were adequately paid. In some divisions their partiality to shifting cultivation has been made use of for raising plantations.

134. The Khonds of Ganjam continued to be on good terms with the department. The system of entrusting the protection of reserved lands to patels on payment of a remuneration of Rs. 4 per square mile tried in the Balliguda Agency, has worked well and it is proposed to extend it to the Rampa forests in Lower Godavari.

135. It is regrettable that the Savaras of the Parlakimedi Maliahs are not yet reconciled to the curtailment of the area formerly freely enjoyed by them for podu cultivation, by the reservation of certain hill-blocks under section 26 of the Forest Act. Some of the Savaras who ventured to clear a block of land were convicted. As the Savaras are refractory and their population is said to be increasing, the problem of providing an alternative means of livelihood for them is a difficult one which has to be solved. The District Forest Officer is said to be investigating the problem and his report is awaited. As the hillmen of Lower Godavari were persistently indifferent in the matter of fire protection, the practice of giving them rewards was discontinued.

136. The Yanadis of Sriharikota continued to be employed by the department in the collection of minor produce and in departmental operations and were as usual granted rewards. They were persuaded to deposit their rewards in the post office savings bank on a specially devised system, under which the withdrawals were controlled by the District Forest Officer. This system was instituted for moral as well as practical reasons. All the sixty-six families employed by the department deposited their savings in the savings bank amounting to Rupees 2,634. The system has been working quite satisfactorily, but the Department of Posts and Telegraphs has raised a technical objection to it. The result of the abolition of the system would be that the Yanadis would squander their savings in a short time, become depraved and decamp from their work. Some of the Yanadis of North and South Cuddapah are employed as forest guards and watchers.

137. The Chenchus of the Nallamalais are gradually beginning to improve. Besides being employed on forest works they were employed as headmen, deputy headmen, metta talayaris, forest guards, watchers and teachers in Chenchu schools. Their population is about 4,000 and a sum of Rs. 23,016 was spent for them (as against Rs. 26,470 in the previous year) which works out to Rs. 5-12-0 per head. The number of criminal cases decreased from 17 (involving 73 men) to 9 (involving 18 men) of which five were forest offences. The newly appointed headmen and deputy headmen were useful in preventing crimes and assisting

the Forest department in controlling the Chenchus. The Chenchus of several gudems have cultivated food crops on temporary leases within reserves and others have been induced to begin cultivation. In some gudems the Chenchus were induced to deposit their surplus earnings in a kind of provident fund from which their cultivation expenses were met. Advances amounting to Rs. 306 were made for the purchase of bulls. The recoveries during the year amounted to Rs. 859 leaving a balance of Rs. 2,135 as against Rs. 2,688 in the previous year. There were 20 Chenchu schools with a total strength of 500 pupils. The expenditure for the purchase of medicines amounted to Rs. 747 as against Rs. 498 in the previous year.

138. The practice of collecting metta (or safe conduct) fees by the Chenchus from pilgrims visiting the Srisailam shrine during Sivaratri festival was regularized. The fees collected amounted to Rs. 3,137, which was distributed to them after the close of the festival in the shape of grain, cattle and cash, with which they purchased provisions and cleared their debts.

139. The Malayalis of North Arcot and Salem besides being engaged on departmental works were also employed as forest subordinates. In order to supplement their earnings they were encouraged to raise orange gardens and were supplied with 100 seedlings by the Department of Labour.

140. As usual the Forest department continued to carry on the land revenue administration of the Javadis. The question of extending the system was deferred pending the bifurcation of the Vellore division, but as the division has now been split up into two, the question of extending the system is being examined by the Collector. Proposals will be submitted on receipt of the Collector's report.

141. The Kundalis of North Mangalore are reported to have given up shifting cultivation.

142. In South Cuddapah a forest guard on duty was murdered in the forest and the accused were committed to the sessions. His family was recommended for the grant of extraordinary gratuity. In East Vellore a watcher on duty was murdered. The accused were sentenced to transportation for life.

143. One ranger, four foresters, twenty guards, nine watchers, a tanadar, five clerks and three menials died during the year. In the Agencies alone there were 12 deaths, without taking into account the members of the families of the subordinates, due to the malignant type of malaria prevailing in these tracts. A severe type of malaria prevailed in the hill tracts which claimed several victims. In the Agencies, subordinates were freely supplied with quinine and other drugs and with Cassia bearinai—a specific for black-water fever. It is proposed to supply them with a costly specific for malaria. In South Coimbatore, a sum of Rs. 651 was spent on anti-malarial measures in the interest of the subordinates and labourers. The medical officers at Manantoddy and Sultan's Battery visited the forests, treated the subordinates and the labourers and suggested preventive measures and a debt of gratitude is owed to them for the trouble taken and the beneficial effect of their

treatment and advice. Elsewhere the department was unable to take any preventive measure except clearing undergrowth round departmental buildings. The general health of the forest staff in the unhealthy tracts was unsatisfactory with the result that a large number of rangers and subordinates had to be granted leave.

144. The important events in the year were—

(i) The bifurcation of the Vellore division, which has been too heavy for a single charge ever since the two divisions were amalgamated into one in 1926.

(ii) Transfer of the control of reserved forests in the Agency from the Agent to the Forest department.

(iii) Separation of the District Forest Officer's office establishments from the Collectorate and the regrouping of the clerical establishment on a Presidency basis.

(iv) The direct recruitment of probationary foresters.

145. During the year only 14 divisional offices were inspected by the Audit branch of the Accountant-General's office. This was due to the fact that the annual audit was reduced to a triennial one as a measure of retrenchment.

146. The Conservators inspected all the District Forest offices in their circles and the District Forest Officers all the Range offices in their divisions. The results were satisfactory. Only two of the Conservators have reported about the inspection of sale and forest depots. This information should invariably be furnished in the future.

147. The relationship between the Revenue and Forest departments continued to be friendly and cordial throughout the Presidency.

148. The keenness of the members of the department referred to in last year's report by Mr. Richmond was maintained. The Chief Conservator relies upon all ranks to live up to the high standard which has been reached.

A. WIMBUSH,
Chief Conservator of Forests.

APPEN-

APPENDIX A.—Comparative statement of number and origin

District.	A. Fires caused by accident or through carelessness in burning fire lines.		B. Fires entering forests by crossing exterior fire lines.		C. Fires beginning inside the Owing to carelessness or accident. By workmen engaged in the forests or by purchasers of forest produce and by hay-cutters.		By villagers, travellers, etc., passing through the forests.		By railway engines.		By lightning or by fire balloons	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Waltair Circle.												
Ganjam	.	..	3	551	..	..	47	12,916	..	..	5	579
Parlakimedi ..	..	..	1	30	..	..	1	1	..	..	..	..
Vizagapatam ..	..	..	..	..	5	388	12	4,204	..	..	..	..
Godavari, Upper.	1	14	5	8,508	..	..	6	259	..	..	..	..
Do. Lower.	..	..	8	792	3	195	45	6,077	..	..	..	..
Guntur	..	..	3	170	1	15	39	4,713	..	..	..	..
Nellore	..	..	2	1,400	1	10	6	385	..	..	..	..
Total ..	1	14	22	11,451	10	608	156	28,555	..	..	5	579
Bellary Circle.												
Anantapur ..	15	2,306	6	2,745	4	3,367	8	6,207	1	700	..	..
Kurnool, East ..	2	31	..	..	..	..	5	566	..	..	..	..
Do. South ..	..	..	2	240	5	345	13	2,986	3	850	..	..
Do. West ..	2	465	11	3,613	1	40	79	35,866	8	3,267	..	..
Cuddapah, North.	..	..	4	2,543	6	3,537	11	1,935	..	..	..	..
Do. South.	1	50	..	..	1	15	11	5,016	..	..	..	..
Total ..	20	2,852	23	9,141	17	7,304	127	52,576	12	4,817	..	..
Salem Circle.												
Chittoor	1	225	4	987	1	114	4	832	1	220	..	..
Vellore East ..	..	..	5	233	1	20	14	632	..	..	..	..
Do. South ..	..	..	..	..	..	..	13	840	..	..	..	..
Salem, North ..	..	..	..	..	..	..	3	217	..	..	..	..
Do. Central ..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	1	225	9	1,220	2	134	34	2,521	1	220	..	..
Coimbatore Circle.												
Kollegal	..	..	..	..	3	115	5	1,371	..	..	..	..
North Coimbatore	3	88	2	380	1	30	22	1,182	..	..	..	..
South do.	4	70	2	40	15	1,011	2	6	..	..	..	..
Madura	2	38	20	1,988	..	..	8	248	..	..	..	..
Tinnevelly ..	5	102	8	1,046	1	36	4	255	..	..	2	25
Total .	14	298	32	3,454	20	1,191	41	3,062	..	..	2	25

DICES.

of fires that occurred during the calendar year 1932.

reserves or fire-traced areas.

By intentional firing.											
Ik order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.		Total, C.		Causes unknown		Total of A, B and C and causes unknown.	
Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
..	..	..	..	22	6,853	74	20,348	..	..	77	* 20,899
..	..	..	..	..	..	1	1	13	1,618	15	1,619
..	..	..	..	..	..	17	4,592	..	..	17	† 4,592
1	14	..	..	..	..	7	273	37	64,828	10	73,623
4	592	..	..	..	..	52	6,864	9	441	69	8,097
..	..	..	..	..	..	40	4,728	8	465	51	5,363
3	370	..	..	4	560	14	1,325	5	443	21	3,168
8	976	..	..	26	7,413	205	38,131	72	67,795	300	117,391
1	120	..	..	4	1,074	18	11,468	10	3,929	49	20,448
7	3,304	1	476	3	2,216	16	6,562	21	23,156	39	29,749
1	100	..	..	9	1,149	31	5,430	1	200	84	5,870
1	200	..	..	..	..	89	39,373	24	11,049	126	54,500
11	4,892	..	..	43	18,566	71	28,930	22	12,354	97	43,827
12	1,524	3	1,422	..	..	27	7,977	39	12,056	67	20,088
33	10,140	4	1,898	59	23,005	252	99,740	117	62,744	412	174,477
44	5,420	1	237	..	..	51	6,823	17	2,695	73	10,730
22	1,306	..	..	..	..	37	1,958	52	3,693	94	5,884
17	778	..	..	..	..	30	1,618	29	3,735	59	5,353
2	661	..	..	..	..	5	878	2	66	7	944
..	..	..	..	..	..	..	..	40	1,778	40	1,778
..	..	..	..	..	..	..	..	35	522	35	522
85	8,165	1	237	..	..	123	11,277	175	12,489	308	25,211
1	120	..	..	3	75	12	1,681	26	5,657	38	7,338
3	235	..	..	..	..	26	1,447	38	2,362	69	4,277
16	180	..	..	..	..	33	1,197	1	10	40	1,317
5	90	..	..	7	111	20	449	79	2,689	121	5,164
33	3,455	4	395	1	5	45	4,170	23	1,168	81	6,476
58	4,080	4	395	11	191	136	8,944	167	11,876	349	24,572

APPENDIX A.—Comparative statement of number and origin

District.	A. Fires caused by accident or through carelessness in burning fire lines.		B. Fires entering forests by crossing exterior fire lines.		C. Fires beginning inside the forests. Owing to carelessness or accident. By workmen engaged in the forests or by purchasers of forest produce and by hay-cutters.		By villagers, travellers, etc., passing through the forests.		By railway engines.		By lightning or by fire balloons.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Ootacamund Circle.												
Mangalore, North	..	..	26	654	..	..	25	375	..	..	..	..
Mangalore, South	1	3	32	1,192	..	..	34	1,259	..	..	..	..
Wynaad	..	..	13	752	..	..	..	..	..	..	..	..
Nilambur ..	6	16	..	..	..	..	..	..	..	..	..	..
Nilgiris, The ..	..	..	..	..	..	..	11	1,202	..	..	..	..
Palghat	4	76	10	192	9	128	3	95	..	..	..	..
Total ..	11	95	81	2,790	9	128	73	2,931	..	..	..	..
Grand Total, Presidency ..	47	3,484	167	28,056	58	9,365	431	89,645	13	5,037	7	604

Note for Waltair Circle.

(a) Includes 489 acres of fire burnt areas in protected forests.
(b) Do. 7,281 do.

of fires that occurred during the calendar year 1932—*cont.*

reserves or fire-traced areas.

By intentional firing.											
In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.		Total of C.		Causes unknown.		Total of A, B and C and causes unknown.	
Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
10	771	..	..	7	159	42	1,305	6	111	74	2,070
..	..	6	124	..	..	40	1,383	75	4,511	148	7,089
..	..	..	..	..	..	..	..	11	1,823	24	2,575
..	..	..	..	3	6	3	6	2	15	14	37
..	..	..	..	..	..	11	1,202	53	1,419	64	2,621
1	5	..	..	5	135	18	363	4	41	36	672
11	776	6	124	15	300	114	4,259	151	7,920	357	15,064
195	24,137	16	2,654	111	30,909	830	162,351	682	162,824	1,726	356,716

APPENDIX B.—Comparative statement of impounded cattle during 1932-33.

District.	Number of cattle impounded.		Average for three years ending 1931-32.
	1931-32.	1932-33.	
Waltair Circle.			
Ganjam	2,746	1,308	1,930
Parlakimedi	..	509	170
Vizagapatam	167	443	160
Godavari, Upper	1,029	1,292	600
Do. Lower	1,217	1,874	1,220
Guntur	5,911	2,051	5,155
Nellore	1,733	1,414	1,595
Total ..	1,2803	8,891	10,830
Bellary Circle.			
Anantapur	8,914	3,486	7,487
Kurnool, East	5,083	3,646	3,667
Do. South	6,689	2,386	7,439
Do. West	6,689	4,271	5,338
Cuddapah, North	4,673	3,640	3,457
Do. South	3,118	3,699	3,279
Total ..	35,166	21,128	30,667
Salem Circle.			
Chittoor	3,374	2,838	2,778
Vellore, East	4,660	3,293	4,071
Do. West	915	1,349	1,025
Salem, North	1,898	1,658	1,536
Do. Central	2,934	2,499	2,209
Do. South	915	1,031	1,160
Total ..	14,696	12,668	12,779
Coimbatore Circle.			
Kollegal	2,626	1,907	2,142
Coimbatore, North	3,553	1,852	2,611
Do. South	611	260	298
Madura	2,555	2,798	2,714
Tinnevelly	2,295	1,254	1,729
Total ..	11,640	8,071	9,494
Ootacamund Circle.			
Mangalore, North	229	284	216
Do. South	285	297	245
Wynaad	176	93	156
Nilambur	274	332	109
The Nilgiris	780	1,055	571
Palghat	321	436	218
Total ..	2,065	2,497	1,515
Grand Total, Presidency ..	76,370	53,255	65,285

ANNUAL FORM No. 25.

Forest Department, Madras Presidency.

Area of Reserved Forests and Reserved Lands during 1932-33.

ANNUAL

Forest Department,

Area of Reserved Forests and

Area of Reserved

Districts.	Area on 1st April 1932.		Added during the year.	Excluded during the year.	Area on 31st March	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent Class I or departmental forests.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Waltair Circle.						
Ganjam	400,069	625	..	..	400,069	625
Parlakimedi	..	..	..	..	..	..
Vizagapatam	196,317	307	(*a*) 1 (*b*) 1,313	(*c*) 21 (*a*) 4,542	193,068	269
Godavari, Upper ..	531,213	830	(*d*) 488	..	531,701	831
Do. Lower ..	365,427	571	(*d*) 23,951 (*a*) 1,439	(*a*) 4,814	386,003	527
Guntur	578,874	904	..	..	578,874	612
Nellore	475,691	743	..	..	475,691	373
Total ..	2,547,591	3,980	27,192	9,377	2,565,406	3,237
Bellary Circle.						
Anantapur	1,145,678	1,790	(*a*) 67	(*e*) 61 (*d*) 204,264	941,420	401
Kurnool, East ..	625,610	978	(*b*) 168	..	625,778	945
Do. South ..	462,304	722	(*c*) 1	(*f*) 873	461,432	664
Do. West ..	604,021	944	..	(*e*) 4	604,017	854
Cuddapah, North ..	505,888	790	(*d*) 204,264	..	710,152	934
Do. South ..	440,978	689	..	..	440,978	671
Total ..	3,784,479	5,913	204,500	205,202	3,783,777	4,469

Note for Waltair Circle—

(*a*) Adoption of correct areas as per section 16 notification.
(*b*) Area notified under section 33 of the Madras Forest Act.
(*c*) Disreserved.
(*d*) Afforested.
(*e*) Notified under section 26. Agency areas transferred to the control of the Forest Department. G.O. Ms. No. 1009, Development, dated 27th July 1932.
(*f*) Reservation cancelled in notification No. 117, dated 31st March 1933.
(*g*) Eliminated from the area notified under section 26.

FOREST DEPARTMENT

FORM No. 25.

Madras Presidency.

Reserved Lands during 1932–33.

Forests.		Area of Reserved Lands.						
1933		Area on 1st April 1932.		Added during the year.	Excluded during the year.	Area on 31st March 1933.		Total area of reserved forests and reserved lands in square miles.
in square miles.								
Class III or ryots forests.	Total.	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
..	625	..	..	(a) 69,420	..	(a) 69,420	109	734
..	..	..	..	(e) 112,879 55	(g) 59	(e) 112,875	176	176
33	302	1,356	2	..	(b) 1,313	(e) 14	..	302
..	831	34,220	54	8,946	(d) 488 (f) 251	29 42,427	66	897
76	603	64,282	100	15,367	(d) 23,951	55,698	87	690
292	904	..	..	..	..	..	..	904
370	743	..	..	..	..	..	..	743
771	4,008	99,858	156	206,667	26,062	280,463	438	4,446
1,070	1,471	23,150	33	(g) 3,595	(d) 17,554 (c) 17	9,174	14	1,485
33	978	168	..	..	(b) 178	..	..	978
57	721	..	..	..	..	..	..	721
90	944	3,789	6	(g) 1,433	(e) 67	5,155	8	952
176	1,110	..	..	(d) 17,554 (g) 682 (h) 3,114	..	21,350	33	1,143
18	689	..	..	(g) 1,046	..	1,046	2	691
1,444	5,913	27,107	42	27,424	17,806	36,725	57	5,970

Note for Bellary Circle—

(a) Wrongly excluded in last year's return, hence now included.

(b) Reserved land of 168 acres published under section 4 in last year's has been notified as reserved forest under section 16 during the year.

(c) Addition and exclusion in reserved forest and reserved lands (panchayat) are due to the correct areas reported by Collectors.

(d) Addition and exclusion are due to the transfer of Vempalle Range from Anantapur division to North Cuddapah division with effect from 1st June 1932 (vide G.O. No. 716, Development, dated 28th May 1932).

(e) Due to disafforestation during the year.

(f) Due to adopting correct area of Vedullacheruvu reserved forest of Kanigiri range as recomputed in 1932.

(g) New areas declared as reserved lands under section 26 of the Madras Forest Act by respective Collectors during the year.

(h) Area of Vontimitta extension B. reserved forest (Chintarajupalle) published under section 4 of Madras Forest Act.

Area of Reserved Forests and

Division.	Area on 1st April 1932.		Added during the year.	Excluded during the year.	Area on 31st March	
						Equivalent
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Class I or Departmental Reserves.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Salem Circle.						
Chittoor	503,260	786	..	(a) 7·40	503,253	578
Vellore, East	713,859	1,115	(b) 11·95	(c) 167,723	544,606	467
				(d) 1,542		
Vellore, West ..	..	..	209,839	..	209,839	302
Salem, North ..	369,686	578	..	(e) 86	369,600	567
Do. Central ..	603,438	943	..	(f) 42,116	561,177	549
				(g) 145		
Do. South	263,181	411	..	..	263,181	256
Total ..	2,453,424	3,833	209,851	211,619	2,451,656	2,819
Coimbatore Circle.	..	..	..	..	..	..
Kollegal Division ..	603,089	942	..	(a) 166	602,923	942
Coimbatore, North Division.	558,100	872	..	(a) 1,479	556,621	830
Do. South Division.	250,255	391	..	(a) 595	249,660	385
Madura District ..	437,243	683	(b) 4,875	(a) 20	442,098	643
Tinnevelly District ..	267,156	417	..	.. ..	267,156	407
Tanjore District. ..	6,468	10	..	.. ..	6,468	6
Total ..	2,122,311	3,316	4,875	(c) 2,260	2,124,926	3,213

Note for Salem Circle—

(a) Represent 3·12 acres, 3·19 acres and 1·09 acres disreserved in Tirupati hill extension, Palmaner and Mordana reserves in Notification Nos. 205, dated 1st June 1932, 394, dated 31st October 1932, and 97, dated 6th March 1933 respectively.

(b) Addition to Karuthamalai reserved forest notified under section 16 in Notification No. 8, dated 4th January 1933.

(c) Area of reserves transferred to the bifurcated West Vellore division formed in G.O. No. 1537, dated 25th November 1932.

(d) Area of Melchengam panchayat reserved forest excluded from East Vellore having been wrongly included both in Central Salem and East Vellore divisions in the last year return.

(e) Represents 48 acres of Maharajagadai, 24 acres of Neralapalli and 14 acres of Denkanikota reserves disreserved in Notification Nos. 234 and 273, dated 20th June 1932 and 12th July 1932, No. 272, dated 12th July 1932 and No. 93, dated 3rd March 1933 respectively.

(f) Represents the area of Anandavadi, Ravandavadi, Ponniar (part) and Melchengam (Panchayat) reserves transferred to West Vellore division.

(g) Area disreserved in Mallapuram extension reserved forests in Notification No. 274, dated 8th July 1932.

(h) Proposed addition to Palmaner reserved forest notified under section 4 in Notification No. 352, dated 1st October 1932.

Reserved Lands during 1932–33—*cont.*

Forests.	Area of Reserved Lands.							
1933.	Area on 1st April 1932.			Added during the year.	Excluded during the year.	Area on 1st April 1933.		Total area of reserved forests and reserved lands in square miles.
in square miles.								
Class III or ryots forests.	Total.	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
208	786	..	..	(*h*) 1·36	..	1·36	..	786
384	851	70	0·01	(*i*) 26·69	(*j*) 70·00 (*k*) 11·95	14·74	·023	851
26	328	..	..	...	..	..	...	328
10	577	..	..	...	..	..	..	577
228	877	3,790	6	..	..	3,790	6	883
155	411	19,302	30	...	..	19,302	30	441
1,011	3,830	23,162	36·01	28·05	81·95	23,108·10	36·023 or 36	3,866
..	942	..	..	..	..	..	..	942
40	870	..	..	..	..	..	..	870
5	390	...	..	..	..	..	..	390
(*e*) 48	691	2	..	..	2	..	..	691
10	417	(*d*) 6	..	..	..	6	..	417
(*f*) 4	10	5,992	9	..	..	5,992	9	19
107	3,320	6,000	9	..	2	5,998	9	3,329

Note for Salem Circle—cont.

(*i*) Proposed additions to Karuthamalai reserved forest notified under section 4 in Notification Nos. 255, dated 15th July 1929 and 315, dated 15th October 1930.

(*j*) Represents the area of reserved lands wrongly shown in the last return but since excluded being one notified by the Collector under rule 5 of the general rules under section 26.

(*k*) Area notified under section 16 in Notification No. 8, dated 4th January 1933 [vide note against (*h*) above].

Note for Coimbatore Circle—

(*a*) Disforested during the year.

(*b*) Four thousand eight hundred and seventy-three acres of Panchayat forests in the Lalgudi taluk of Trichinopoly district comprised in the Ayyalur range of Madura division previously included in the return of South Salem division of the Salem circle now shown in this statement.

(*c*) Includes 17 acres of Panchayat forest.

(*d*) Omitted in the previous year return.

(*e*) Out of 48 square miles of class III forests and area of 4 square miles is under the control of the Forest Department.

(*f*) Under the control of the Forest Department.

Area of Reserved Forests and

Districts.	Area on 1st April 1932.		Added during the year.	Excluded during the year.	Area on 31st March	Area of Reserved Equivalent
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Class I or Departmental forests.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Ootacamund Circle.						
Mangalore, North ..	229,896	359	(a) 37,238	..	267,134	417
Do. South ..	281,043	439	(b) 5,203	(a) 37,238	249,008	389
Wynad	167,999	262	..	.. ..	167,999	262
Nilambur	68,822	108	..	.. ..	68,822	108
The Nilgiris	309,730	484	..	(d) 0·24	309,730	484
Palghat	167,898	262	..	..	167,898	262
Total ..	1,225,388	1,914	42,441	37,238·24	1,230,591	1,912
Parlakimedi Maliahs.	..	..	..	..	..	..
Total ..	..	..	..	..	..	..
Grand Total, Presidency ..	*12,133,193	18,955	488,859	465,696·24	12,156,356	15,650

Note for Ootacamund Circle—

(a) Area added from South Mangalore division on the abolition of Bettangady range.

(b) Area added under section 16.

(c) Area of Maloth block published under section 4 of the Forest Act, in Notification No. 375, dated 14th October 1932.

(d) Area disforested under section 24.

Reserved Lands during 1932-33—*cont.*

Forests.		Area of Reserved Lands.						
1933.		Area on 1st April 1932.		Added during the year.	Excluded during the year.	Area on 31st March 1933.		Total area of reserved forests and reserved lands in square miles.
in square mile.								
Class III or ryots forests.	Total.	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
..	417	..	..	..	..	..	..	417
..	389	5,203	8	(e) 689	(e) 5,203	689	1	390
..	262	22	..	..	..	22	..	262
..	108	11,510	18	..	..	11,510	18	126
..	484	1,210 (e) 2,819	2 (e) 5	..	..	1,210 (e) 2,818	(f) 6	490
10	262	.. ..	..	..	..	..	..	262
10	1,922	20,764	33	689	5,203	16,249	25	1,947
..	..	112,879	176	..	..	..	..	..
..	..	289,764	453	..	..	..	..	..
						362,643·1		
3,343	16,993	† 176,891	† 276·01	234,808·05	49,154·95	or 362,644	·565	19,558

Note for Ootacamund Circle—cont.

(e) Tadapatla lands.

(f) Correct area.

* Correct figure adopted.

† Revised area adopted as the Agency areas were transferred to the control of Forest Department, in G.O. Mis. No. 1009, Development, dated 27th July 1932.

ANNUAL FORM No. 28.

Forest Department, Madras Presidency.

Progress made in Working Plans during 1932-33.

District.	Areas for which Working Plans have been completed and approved by the Chief Conservator of Forests.		Areas for which Working Plans are being compiled or have been compiled but not sanctioned.		Areas for which Working Plans have still to be taken in hand.	Total forest area as per form 25.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
WALTAIR CIRCLE.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Reserved Forests.						
Ganjam	625	..	..	..	..	625
Parlakimedi	..	..	..	..	..	..
Vizagapatam	211	..	..	..	(*b*) 58	269
Godavari, Upper	..	..	..	..	831	831
Do. Lower	393	..	..	..	134	527
Guntur	35	..	(*d*) 540	..	37	612
Nellore	80	..	39	..	254	373
Total	1,344	..	579	..	1,314	3,237
Reserved Lands.						
Ganjam	..	..	..	..	(*a*) 109	..
Parlakimedi	..	..	..	..	(*c*) 176	..
Vizagapatam	..	..	..	..	..	..
Godavari, Upper	..	..	..	..	66	
Do. Lower	..	..	..	..	87	..
Guntur	..	..	..	..	..	..
Nellore	..	..	1	..	..	..
Total	..	..	..	..	438	438
BELLARY CIRCLE.						
Reserved Forests.						
Anantapur	(*a*) 398	..	..	..	(*e*) 3	405
Kurnool, East	915	..	..	..	..	944
Do. South	612	..	(*c*) 9	..	(*f*) 43	669
Do. West	298	(*b*) 556	..	..	..	854
Cuddapah, North	(*a*) 928	..	..	..	(*g*) 6	934
Do. South	113	..	(*d*) 558	..	..	671
Total	3,294	556	567	..	52	4,416

Note for the Waltair Circle—

(*a*) Represents area in Balliguda Agency notified under section 26 of the Madras Forest Act.
(*b*) Includes 2 square miles of forest notified under section 33 of the Madras Forest Act.
(*c*) Notified under section 26 of the Madras Forest Act. There are no Reserved Forests notified under section 16 in the whole division.
(*d*) Working plan for the whole area sanctioned since close of the year.

Note for Bellary Circle—

(*a*) Increase and decrease are due to transfer for Vempalle Range from Anantapur division to Cuddapah North division during the year.
(*b*) Area of Nallamalai Working Plan sanctioned in Chief Conservator's Proceedings Mis. No. 447, dated 12th October 1932.
(*c*) A tentative working scheme for 9 square miles in Nandyal Terai Block I (Gazulapalli) which was sanctioned by the Conservator is in force.
(*d*) Working plan for this area has been completed and is pending Chief Conservator's sanction.
(*e*) Area of Madhanikonda Reserved Forest which was transferred from Class III to Class I.
(*f*) Area of Class I reserves of Kanigiri range.
(*g*) Area of Chennupalle Reserved Forest retained under Class I as no panchayat is yet formed for it.

Progress made in Working Plans during 1932-33—*cont.*

District.	Areas for which Working Plans have been completed and approved by the Chief Conservator of Forests.		Areas for which Working Plans are being compiled or have been compiled but not sanctioned.		Areas for which Working Plans have still to be taken in hand.	Total forest area as per form 25.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
BELLARY CIRCLE—*cont.*	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS
Reserved Lands.						
Cuddapah, North ..	..	..	..	..	(*h*) 5	5
Total ..	..	..	..	..	5 + 51 (A)	5 + 51 *
Unclassed Forests.						
Anantapur	(*i*) 1	..	..	..	..	1
SALEM CIRCLE.						
Chittoor	577	..	..	..	..	577
Vellore, East	302	..	165	..	..	467 *
Do. West ..	302	..	..	..	..	302 *
Salem, North ..	141	..	217	..	210	568
Do. Central ..	(*a*) 527	..	36	..	92	655 †
Do. South	(*b*) 286	..	..	..	..	286 ‡
Total ..	2,135	..	418	..	(*c*) 302	(*d*) 2,855

Note for Bellary Circle Reserved Lands—

(*h*) Area of proposed Chintarajupalle Reserved Forest for which section 4 notification has been published.

(*i*) Area of Garaga unreserve included in the sanctioned Working Plan of Anantapur division.

* Reserved lands for which working plans have not yet to be taken up.

Note for Salem Circle—

* The difference between the last year's and this year's figures is due to transfer of 64 square miles of reserved forests from Central Salem to West Vellore division during the year.

† The difference between the last year's and this year's figures is due to transfer of 64 square miles of reserved forests to the West Vellore division and inclusion of 6 square miles of reserved lands.

‡ The difference between the last year's and this year's figures is due to inclusion of 30 square miles of reserved lands.

(*a*) This excludes 2·14 square miles of unreserves and includes 6 square miles of reserved lands notified under section 4, both of which are covered by the working plan sanctioned in Chief Conservator's Proceedings No. 444, Press, dated 17th October 1931.

(*b*) Includes 30 square miles of reserved lands notified under section 4.

(*c*) Includes 36 square miles of the Central and South Salem divisions

(*d*) Reserved Forests, 2,819 and reserved lands 36.

Progress made in Working Plans during 1932-33—*cont.*

District.	Areas for which Working Plans have been completed and approved by the Chief Conservator of Forests.		Areas for which Working Plans are being compiled or have been compiled but not sanctioned.		Areas for which Working Plans have still to be taken in hand.	Total forest area as per form 25.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
COIMBATORE CIRCLE.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Kollegal	(*a*) 942	..	..	..	..	942
Coimbatore, North ..	..	(*b*) 830	..	..	..	830
Do. South ..	115	(*d*) 3	..	248	19	385
Madura	364	..	17	..	262	643
Tinnevelly cum Ramnad.	(*a*) 287 (*c*) 17	..	..	..	103	407
Tanjore	15	..	..	..	..	15
Total ..	(*a*) 1,740	833	17	248	(*k*) 384	(*k*) 3,222
				(*k*) Reserved forest ..		3,213
				Reserved lands ..		9
OOTACAMUND CIRCLE.						
Reserved Forests.						
Mangalore, North .	42	..	(*a*) 375	..	..	417
Do. South ..	7	..	(*a*) 373	..	(*c*) 9	389
Wynad	158	104	..	..	..	262
Nilambur	108	..	..	..	..	108
Palghat	104	..	(*b*) 142	..	(*d*) 6	252
The Nilgiris	159	..	..	..	325	484
Total ..	(*a*) 578	104	890	..	340	1,912
Reserved Lands.						
Mangalore, South ..	..	..	..	..	(*e*) 1	1
The Nilgiris	..	..	..	..	(*f*) 6	6
Total ..	..	..	..	..	7	7

Note for Coimbatore Circle—

(*a*) Area under temporary scheme sanctioned by the Conservator.
(*b*) Area of working plan for North Coimbatore division sanctioned by the Chief Conservator in his Proceedings Press No. 152, dated 26th March 1933.
(*c*) Area of lapsed scheme, sanctioned by the Chief Conservator of Forests.
(*d*) Area added to the Pollachi range Working Plans, Chief Conservator's Proceedings Ms. No. 462, dated 21st October 1932.
(*k*) Includes 9 square miles of Tanjore district.

Note for Ootacamund Circle—

(*a*) Working Plans for the entire area already completed but waiting for Chief Conservator's sanction. They have been given effect to during 1932-33.
(*b*) Working Plan already completed but waiting for Chief Conservator's sanction. It has been given effect to during 1933-34.
(*c*) This is the extent of 4 blocks declared as Reserved Forest.
(*d*) Area of portions of Bolampatti blocks I and II.
(*e*) This is the area of Maloth block notified under section 4 of the Forest Acts.
(*f*) Todapatlu lands and Badaga plantations scattered over the district. The correct area is 6 square miles 188 acres.

Progress made in Working Plans during 1932-33—*cont.*

District.	Areas for which Working Plans have been completed and approved by the Chief Conservator of Forests.		Areas for which Working Plans are being compiled or have been compiled but not sanctioned.		Areas for which Working Plans have still to be taken in hand.	Total forest area as per form 26.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
OOTACAMUND CIRCLE —*cont.*	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Leased Forests.						
Nilambur	18	..	..	..	..	18
Grand Total	696	104	890	..	347	1,937
Grand Total, Presidency—						
Reserved Forests.	(*a*) 9,091	1,493	(*a*) 2,471	248	2,347	15,650
Reserved Lands ..	..	..	..	..	547	547
Leased Forests ..	18	..	..	..	..	18
Total ..	9,109	1,493	2,471	248	2,894	16,215

(*a*) Revised figures adopted.

ANNUAL FORM No. 29.

Communications and Buildings during 1932-33.

Description.	Name of division.	At the commencement of the year.			Additions and exclusions during the year.			At the close of the year.			Repairs during the year.		
		Number.	Length. M. F. CH.	Capital cost. RS.	Number.	Length. M. F. CH.	Capital cost. RS.	Number.	Length. M. F. CH.	Capital cost. RS.	Number.	Length. M. F. CH.	Cost. RS.
	Waltair Circle.												
Roads and bridges including culverts.	Ganjam	51	102 3 6	69,710	..	1 0 2	1,246	31	103 3 8	70,956	24	75 5 5	2,304
	Parlakimedi ..	..	..	..	..	..	..	..	..	..	..	..	..
	Vizagapatam ..	22	62 2 0	15,925	..	..	..	22	62 2 0	15,925	16	30 4 0	1,109
	Godavari, Upper.	21	174 0 0 (a)	32,548	1	9 5 9	742	22	183 5 9	33,290	12	55 6 6	639
	Do. Lower.	20	102 6 0	41,664	..	..	(b) 309	20	102 6 0	41,973	7	28 1 6	1,960
	Guntur	33	185 0 0	32,184	1	1 0 0	50	34	186 0 0	32,234	7	16 1 0	914
	Nellore	26	152 6 0 (k)	13,154	2	4 6 0	379	28	157 4 0	13,533	13	56 0 0	768
	Total ..	153	779 1 6	2,05,185	4	16 4 0	(c) 2,726	157	795 5 5	2,07,911	79	262 2 7	7,694
Buildings, residential and non-residential.	Ganjam	116	..	91,984	2	.	2,856	118	..	94,840	91	..	5,317
	Parlakimedi ..	39	..	5,454	1	..	(f) 20	40	..	5,474	6	..	102
	Vizagapatam ..	40	..	11,215	1	..	(e) 37	47	..	15,149	23	..	830
	Golgonda Agency	6	..	3,847									
	Godavari, Upper.	79	..	75,030	— 1	..	— 180	80	..	74,850	49	..	324
	Do. Lower.	101	..	77,956	— 3	..	500 — 591	98	..	77,865	56	..	2,689 2,135
	Guntur	50	..	42,884	— 1	..	— 297	49	..	42,587	17	..	709
	Nellore	33	..	46,417	— 1	..	+ 1,024 — 400	32	..	47,041	23	..	605
	Total ..	458 + 6	..	3,54,787	— 2	..	3,019	464	..	3,57,806	266	..	(d) 12,711

Other works such as wells, etc.	Ganjam	25			4,753					25			4,753	10			258
	Parlakimedi	2			559					2			559				
	Vizagapatam	9			2,511					9			2,511	1			19
	Godavari, Upper.	19			16,239					19			16,239	9			52
	Do. Lower.	15			4,295	— 1			+ 94 — 30	14			4,359	4			110
	Guntur	11			1,309					11			1,309	2			46
	Nellore	16			2,145					17			2,176	18			78 30
	Total	97			31,811	— 1			+ 64	97			31,875	44			593
	Bellary Circle.																
Roads and bridges including bridle-paths and culverts.	Anantapur	117	48	2	2	8,506	(a) — 2	— 11	7	2	(a) — 4,757	115	36	3	0	3,749	5	19	5	9	360
	Kurnool, East	54	322	7	0	65,293					(d) + 455	54	322	7	0	65,748	16	23	3	0	968
	Do. South	26	139	0	0	47,468						26	139	0	0	47,468	9	55	0	0	2,907
	Do. West	10	77	0	5	34,187	(b) + 1	+ 5	3	0	Not known.	11	82	3	5	34,187	8	15	0	0	1,243
	Cuddapah, North	34	145	5	4	25,387	(a) + 2	+11	7	2	(a) + 4,757	36	157	4	6	30,144	3	32	0	0	554
	Do. South.	37	192	3	7	46,271		+ 3	1	8	(d) + 400	37	195	5	5	46,671	15	51	0	2	2,682
	Total	278	925	2	8	2,27,112	+ 1	+ 8	4	8	+ 855	279	933	7	6	2,27,967	56	196	1	1	8,714
Buildings, residential and non-residential.	Anantapur	28				48,821	(a) — 4 (c) — 2				(a) — 3,396 (c) — 5,359	22				40,066	14				989
	Kurnool, East	70				70,497	(d) + 3				(d) + 231 — 44	73				70,684	46				938
	Do. South	55				1,00,813	(c) — 2				(c) — 213										
	Do. West	81				1,36,399	(c) +18 (c) — 9				(c) — 837 (d) + 380 (c) — 161	71				99,763	31				1,349
	Cuddapah, North.	48				82,102	(d) + 6 (a) + 4 (e) — 1				(f) + 1,311 (d) + 1,237 (a) + 3,396 (e) — 121	72 56				1,37,929 86,614	38 21				1,079 1,059
	Do. South.	86				93,235						86				93,235	50				1,319
	Total	368				5,31,867	+ 12				— 3,576	380				5,28,291	200				6,733

Note for Waltair Circle—

(a) Correct figure now adopted.
(b) Represents amount paid for the land acquisition for Kachalur road.
(c) Excludes Rs. 604 spent on timber slides at Papikonda by Forest Engineer.
(d) Excludes Rs. 2,249 cost of establishment.
(e) Debited to 8.b, Regeneration.
(f) Debited to Ordinary.
(k) Revised figures adopted in Waltair and Ootacamund circles.

Communications and Buildings during 1932-33—*cont.*

Description	Name of division	At the commencement of the year. Number.	Length. M. F.	Capital cost. Rs. A.	Additions and exclusions during the year. Number.	Length. M. F.	Capital cost. Rs.	At the close of the year. Number	Length. M. F.	Capital cost. Rs. A.	Repairs during the year. Number.	Length. M. F.	Cost. Rs. A. P.
	Bellary Circle—cont.												
Other works such as wells.	Anantapur ..	16	..	4,185 0	(*a*) — 2	..	— 406	14	..	3,779 0	3	..	7 0 0
	Kurnool, East ..	22	..	7,391 0	..	..	(*d*) 4,147	22	..	7,538 0	3	..	66 0 0
	Do. South ..	13	..	9,052 0	..	..	(*c*) — 4,649 (*d*) + 200	13	..	4,603 0	2	..	9 0 0
	Do. West ..	12	..	10,695 0	..	..	..	12	..	10,695 0	..	..	..
	Cuddapah, North.	83	..	2,745 0	(*a*) + 2	..	(*a*) + 406	85	..	3,151 0	2	..	35 0 0
	Do. South.	15	..	5,139 0	..	..	..	15	..	5,139 0	..	..	..
	Total ..	161	..	39,207 0	..	..	4,302 0	161	..	34,905 0	10	..	117 0 0
	Salem Circle.												
Roads including bridle-paths and culverts.	Chittoor	42	185 0	42,185 0	..	..	..	42	185 0	42,185 0	23	116 2	3,476 0 0
	Vellore, East ..	36	176 6	1,11,799 0	7	39 5	(*a*)—56,621	29	137 1	55,178 0	22	78 0	1,828 0 0
	Do. West ..	..	..	..	7	39 5	(*a*)+56,621	7	39 5	56,621 0	7	39 5	1,417 0 0
	Salem, North ..	14	96 7	46,418 0	..	..	..	14	96 7	46,418 0	11	76 5	3,360 0 0
	Do. Central ..	15	73 5	16,575 6	..	..	..	15	73 5	16,575 6	9	55 0	1,493 0 0
	Do. South ..	34	151 5⅘	34,705 0	..	..	..	34	151 5⅘	34,705 0	14	26 3	970 0 0
	Total ..	141	683 7⅘	2,51,682 6	..	..	..	141	683 7⅘	2,51,682 6	86	391 7	12,544 0 0
Buildings residential and non-residential.	Chittoor	81	..	89,635 0	1	..	(*b*) — 30	80	..	89,605 0	42	..	(*l*) 2,368 11 4 (*m*) 820 7 0
	Vellore, East ..	97	..	1,43,058 0	1	..	(*c*) — 60	56	..	1,18,035 0	52	..	(*l*) 1,007 0 0 (*m*) 1,353 0 0
	Do. West ..	..	..	..	40 32	..	(*a*) 24,963 (*d*) + 1,800	32	..	69,999 0	18	..	(*l*) 644 0 0 (*m*) 707 0 0
							(*a*) + 24,963 (*e*) + 43,236						
	Salem, North ..	42	..	76,169 0	..	..	..	42	..	76,169 0	35	..	(*l*) 1,255 0 0 (*m*) 276 0 0
	Do. Central ..	92	..	83,462 0	..	..	..	92	..	83,462 0	25	..	(*l*) 1,981 10 0 (*m*) 1,055 6 0
	Do. South ..	54	..	53,235 0	..	..	..	54	..	53,235 0	22	..	(*l*) 1,341 0 0 (*m*) 934 10 0
	Total ..	366	..	4,45,559 0	(*n*) — 10	..	+ 44,946	356	..	4,90,505 0	194	..	13,748 12 4

Other works, such as wells, etc.	Chittoor	87	..	11,577	0	..	..	..		37	..	11,577	0	2	..	20	0	0
	Vellore, East ..	63	..	5,938	0	—26	..	(f) + 6,257		37	..	12,195	0	3	..	39	0	0
	Do. West ..	..	..	..		+18 / + 1 / (p) — 1	..	(g) + 7,335 / (h) + 214 / (i) + 41		18	..	7,590	0	2	..	61	0	0
	Salem, North ..	19	..	4,723	0	..	..	(j) + 53		19	..	4,776	0	4	..	35	0	0
	Do. Central ..	27	..	2,551	0	..	..	..		27	..	2,551	0	4	..	35	0	0
	Do. South ..	10	..	2,853	0	+ 1	..	(k) + 76		11	..	2,929	0	..	..	..		
	Total ..	156	..	27,642	0	(o) — 7	..	+ 13,976		149	..	41,618	0	15	..	190	0	0
	Coimbatore Circle.											42,728	0					
Roads including bridle-paths.	Kollegal ..	14	99	2	42,728	0	..	..		14	99	2 (a) 4,382	0	11	60	3	3,050	0	0
	Coimbatore, North	14	112	4	82,240	0	..	..		14	112	4 82,240	0	14	101	4	7,577	0	0
	Do South	16	51	2	3,77,840	0	3	9 4	5,546	19	60	6 3,83,386	0	11	40	4	10,778	0	0
	Madura	46	298	4	1,35,710	0	— 1	— 9 0	(c) — 3,492 / (b) + 531	45	289	4 1,32,749	0	36	211	7	8,295	0	0
	Tinnevelly cum Ramnad.	81	242	4	80,308	0	..	..	..	81	242	4 80,308	0	24	85	7	4,054	0	0
	Total ..	171	804	0	7,18,826	0	2	0 4	2,585	173	804	4 7,25,793	0	96	500	1	33,754	0	0

Note for Bellary Circle—

(a) Additions and exclusions are due to transfer of Vempalle range from Anantapur division to North Cuddapah division during the year.

(b) Taking into account the portion of the cart-track from Tammalabailu to Pecheruvu during the year in Kurnool West division.

(c) Additions and exclusions are due to wrong account in previous year returns, hence now added and excluded during the year.

(d) New additions during the year.

(e) Written off during the year.

(f) Value of sites included in Kurnool West division.

Note for Salem Circle—

(a) Represents the capital cost of seven roads and thirty-two buildings transferred to the newly formed West Vellore division from the old Vellore division.

(b) Old tanah shed at Tirupati written off in Conservator's sanction order No. 143 of 1932, dated 18th October 1932.

(c) Maistri's shed at Kilminnel written off in Conservator's sanction order No. 60 of 1932, dated 5th May 1932.

(d) Represents the amount spent on the construction of Nellivasal rest-house during the year.

(e) Increase in the capital cost due to the adoption of the values in the building register.

(f) Increase in the capital cost of wells due to revaluation.

(g) Capital cost of the seventeen wells transferred to West Vellore division as revalued by the District Forest Officer.

(h) Cost of construction of a well at Nellivasal during the year.

(i) Cost of improvements made to the well at Pudur, West Vellore division.

(j) Cost of improvements made to the well at Urigam rest-house, North Salem division

(k) Cost of trial shaft for a well at Tammampatti, South Salem division.

(l) Cost of repairs done during the year.

(m) Cost of establishment.

(n) The decrease of ten buildings from the last year's return is due to writing off of two buildings and accounting the several structures at the sandalwood depot at Tiruppattur as one against nine.

(o) The decrease of seven wells is due to the incorrect figure furnished in the last year's return for the old Vellore division.

(p) Represents the abandoned well at Kottur.

Communications and Buildings during 1932–33—*cont.*

Description of work	Name of division.	At the commencement of the year. Number.	Length.	Capital cost.	Additions and alterations during the year. Number.	Length.	Capital cost.	At the close of the year. Number.	Length.	Capital cost.	Repairs during the year. Number.	Length.	Cost.
	Coimbatore Circle—cont.		M. F.	Rs.		M. F.	Rs.		M. F.	Rs.		M. F.	Rs.
Buildings, residential and non-residential.	Kollegal	64	..	83,230	— 1	..	— 2,340	63	..	80,890	19	..	1,140
	Coimbatore, North.	77	..	82,356	— 4	..	— 3,366	73	..	78,990	57	..	1,495
	Do. South.	86	..	1,64,384	+ 6 — 3	.. ..	— 10,877 — 5,172 (*d*) — 70	89	..	1,70,019	73	..	3,175
	Madura	106	..	1,44,223	— 1	..	— 3,180	105	..	1,41,043	86	..	2,173
	Tinnevelly cum Ramnad. ..	62	..	1,03,948	— 1	..	+ 605 — 900	61	..	1,03,653	55	..	2,282
	Total	395	..	5,78,141	.. — 4	.. ..	— 3,546	391	..	5,74,595	290	.. ..	10,265
Other works, such as wells, etc.	Kollegal	18	..	11,650	..	..	..	18	..	11,650	6	.. ..	63
	Coimbatore, North.	19	..	4,421	— 2	..	— 608	17	..	3,813	2	..	17
	Do. South.	9	..	3,674	.. ..	..	(*e*) 416 (*f*) 602	9	..	4,692	..	..	1,009
	Madura	35	..	7,511	..	..	..	35	..	7,511	3	..	41
	Tinnevelly .. cum Ramnad.	14	..	1,770	.. ..	.. ..	....	14	..	1,770	5	..	29
	Total ..	95	..	29,026	— 2	..	410	93	..	29,436	16	..	1,159
	Ootacamund Circle.												
Roads including bridle-paths.	Mangalore, North..	36	74 6	15,449	..	..	..	36	74 6	15,449	9	43 6	215
	Do. South ..	39	111 0	31,308	+ 1	7 5	53	40	118 5	31,361	18	70 6	451
	Wynad	59	218 4	84,510	.. + 3	.. 7 7	(*a*) 40,111	62	226 3	1,24,621	38	157 6	6,137
	Nilambur	22	38 7	22,955	..	..	335	22	38 7	23,290	16	24 2	1,839
	Do.	3	..	1,03,237	..	..	(*b*) 8,834	3	..	1,12,071	..	..	..
	The Nilgiris ..	70	115 3	41,171	..	.. ..	..	70	115 3	41,171	70	115 3	1,686
	Palghat	53	257 5	1,68,005	..	..	..	53	257 5	1,68,005	47	214 3	3,756
	Total ..	282	816 1	4,66,635	4	15 4	49,333	286	831 5	5,15,968	198	626 2	14,084

Buildings, residential and non-residential.	Mangalore, North	77	..	80,643	— 2	..	(c) — 1,177	75	..	79,466	63	..	851
	Do. South	49	..	75,853	— 3	..	(e) — 2,994						
					+ 1	..	(a) + 971	47	..	73,913	40	..	518
							+ 83						
	Wynad	120	..	1,39,548	— 2	..	(e) 615	118	..	1,36,212	114	..	2,317
							(c) — 3,951						
	Nilambur	51 + 1 (f)	..	1,23,357	..	..	324	52	..	1,25,636	47	..	2,278
	The Nilgiris	91	..	1,955									
				1,46,628	..	..	..	91	..	1,46,628	43	..	1,838
	Palghat	61	..	1,54,047	+ 2	..	(f) 5,738	62	..	1,57,185	58	..	1,735
	Do. (Chenat Nair)	10	..	30,827	— 1	..	(c) — 600						
					— 7	..	(g) — 27,412	3	..	3,415	..	..	..
	Total	459 + 1	..	7,50,903	— 12	..	— 30,403	448	..	7,22,455	365	..	9,537
				1,955									
Other works, such as wells, etc.	Mangalore, North	32	..	11,231	..	..	..	32	..	11,231	4	..	24
	Do. South	16	..	6,528	..	..	+ 19	16	..	6,547	8	..	77
	Wynad	23	..	8,799	..	..	(h) + 535	23	..	9,018	14	..	174
	Nilambur	8	..	3,458	2	..	(c) — 316	10	..	4,970	6	..	31
	The Nilgiris	1	..	3,919	..	..	1,512	1	..	3,919	1	..	30
	Palghat	13	..	4,798	..	..	..	13	..	4,934	6	..	143
	Do. (Chenat Nair)	3	..	9,739	— 2	..	(i) + 136	1	..	926	..	..	..
							(g) — 8,813						
	Total	96	..	48,472	..	..	— 6,927	96	..	41,545	39	..	479
Grand Total, Presidency.	Roads including bridle-paths and culverts.	1,025	4,008 0	18,63,440	11	41 4	+ 55,499	1,036	4,049 4	19,24,939	515	1,976 5	76,790
	Buildings, residential and non-residential.	(k)2,053	(k) ..	(k)2,66,312	(k) — 16	..	+ 10,440	2,037	..	2,76,752	1,314	..	52,990
	Other works	605	..	1,76,158	— 10	..	+ 3,221	595	..	1,79,379	124	..	2,538

Note for Coimbatore Circle—

(a) Cost of Thamaraikarai-Sengolam road which was omitted during the previous years now added.

(b) Cost of land acquisition for Ayyalur-Thoppaswamimalai road and Sirumalai-Konapatti road.

(c) Highway bridle path transferred to the Tea estates, India, Ltd.—vide C.C P. No. 395/32, dated 1st September 1932.

(d) Difference adjusted in stock accounts.

(e) Cost of telephone materials.

(f) Installation of force pump at Mount Stuart.

Note for Ootacamund Circle—

(a) Includes Rs. 39,875 spent for metalling Poothakkal-Bavali road, now brought to account.

Note for Ootacamund Circle—cont.

(b) Expenditure incurred by the Forest Engineer on roads and bridges under construction by him.

(c) Dismantled, written off or sold.

(d) Received from the Forest Utilization officer.

(e) Extension of Mysore Range officer's quarters.

(f) Transferred from the Forest Engineer.

(g) Disposed of by the Forest Engineer.

(h) Expenditure on a new well still incomplete.

(i) Cost of deepening a well.

(j) Range officer's quarters at Beypore omitted in last year's return.

(k) Revised figures adopted in Waltair and Ootacamund circles.

ANNUAL FORM No. 30.

Forest Department, Madras.

Return of Breaches of Forest Rules during 1932–33.

District.	Cases pending from 1931–32.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases	Persons.	Cases.	Persons.	Cases.	Persons.	
WALTAIR CIRCLE.														
Reserves.														
Ganjam .. A ..	13	1	95	6	9	111	124	59	251	44	126	103	377	21
Ganjam .. B ..	58	1	347	42	9	399	457	355	1,158	24	112	379	1,270	78
Ganjam .. C ..	..	94	39	..	..	133	..	..	..	..	..	..	..	..
Total ..	(a) 71	96	481	48	18	643	581	414	1,409	68	238	482	1,647	99
Parlakimedi. A ..	23	..	10	..	..	10	33	21	71	7	17	28	88	5
Parlakimedi. B ..	11	..	150	24	3	177	188	114	219	8	26	122	245	66
Parlakimedi. C ..	..	15	..	..	..	15	..	..	..	..	..	..	..	..
Total ..	34	15	160	24	3	202	221	135	290	15	43	150	333	71
Vizagapatam. A ..	39	..	117	7	3	127	166	34	87	116	332	150	419	16
Vizagapatam. B ..	15	1	140	13	6	160	175	137	325	8	48	145	373	30
Vizagapatam. C ..	..	..	5	..	..	5	..	..	..	..	..	..	..	..
Total ..	(b) 54	1	262	20	9	292	341	171	412	124	380	295	792	46
Upper Godavari. A ..	1	..	26	13	..	39	40	29	69	3	9	32	78	8
Upper Godavari. B ..	34	1	60	24	17	102	136	125	222	2	6	127	228	9
Upper Godavari. C ..	..	..	2	..	4	6	..	..	..	..	..	..	..	..
Total ..	35	1	88	37	21	147	176	154	291	5	15	159	306	17

Lower Godavari.	A	..	79	..	41	25	1	67	146	119	312	2	11	121	323	25
	B	..	76	..	200	79	2	281	357	278	549	11	18	289	567	68
	C	..	..	69	..	..	..	69	..	..	..	..	..	..	..	..
	Total	..	155	69	241	104	3	417	503	397	861	13	29	410	890	93
Guntur	A	..	235	..	207	66	9	282	517	88	241	317	954	405	1,195	112
	B	..	67	..	294	104	7	405	472	382	890	5	12	387	902	85
	C	..	..	..	4	..	..	4	..	..	..	..	..	..	..	..
	Total	..	302	..	505	170	16	691	989	470	1,131	322	966	792	2,097	197
Nellore	A	..	40	..	160	73	1	234	274	20	66	218	520	238	586	36
	B	..	20	..	171	79	1	251	271	209	406	10	19	219	425	52
	C	..	..	21	4	..	..	25	..	..	..	..	..	..	..	..
	Total	..	60	21	335	152	2	510	545	229	472	228	539	457	1,011	88
	A	..	430	1	656	190	23	870	1,300	370	1,607	707	1,969	1,077	3,576	223
	B	..	281	3	1,362	365	45	1,775	2,056	1,600	3,769	68	241	1,668	4,010	388
	C	..	..	199	54	..	4	257	..	..	..	..	..	..	..	..
Total, Reserves		..	711	203	2,072	555	72	2,902	3,356	1,970	5,376	775	2,210	2,745	7,586	611

Unreserves.

Ganjam	A	..	1	..	4	..	..	4	5	2	5	..	..	2	5	3
	B	..	3	..	75	..	..	75	78	47	102	23	38	70	140	8
	C	..	..	..	4	..	..	4	..	..	..	..	..	..	..	..
	Total	..	4	..	83	..	..	83	83	49	107	23	38	72	145	11
Parla-kimedi.	A	..	13	..	2	..	..	2	15	8	26	1	2	9	28	6
	B	..	6	..	34	..	1	35	41	28	81	3	20	31	101	10
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	19	..	36	..	1	37	56	36	107	4	22	40	129	16
Vizaga-patam.	A	..	3	..	31	7	1	39	42	41	46	1	4	42	50	..
	B	..	6	..	69	13	142	224	230	223	494	..	..	223	494	7
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	9	..	100	20	143	263	272	264	540	1	4	265	544	7

A = Cases taken to court. B = Cases compounded. C = Cases undetected.

Return of Breaches of Forest Rules during 1932-33—*cont.*

District.		Cases pending from 1931-32.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
WALTAIR CIRCLE—*cont.*															
***Unreserves*—cont.**															
Upper Godavari.	A	1	..	96	..	..	96	97	77	150	4	5	81	155	16
	B	40	..	59	..	..	59	99	91	167	..	..	91	167	8
	C	..	..	9	..	..	9	..	..	..	..	..	..	..	..
	Total	41	..	164	..	..	164	196	168	317	4	5	172	322	24
Lower Godavari	A	10	2	58	2	1	63	73	48	183	24	67	72	250	1
	B	37	1	298	13	45	357	394	236	398	99	131	335	529	59
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	47	3	356	15	46	420	467	284	581	123	198	407	779	60
Guntur	A	39	..	181	..	12	193	232	175	357	..	..	175	357	57
	B	102	..	153	25	7	185	287	182	398	..	..	182	398	105
	C	..	..	26	..	..	26	..	..	..	..	..	..	..	..
	Total	141	..	360	25	19	404	519	357	755	..	..	357	755	162
Nellore	A	42	..	134	..	7	141	183	7	9	130	276	137	285	46
	B	43	..	356	..	11	367	410	333	540	3	3	336	543	74
	C	..	..	33	..	..	33	..	..	..	..	..	..	..	..
	Total	(c) 85	..	523	..	18	541	593	340	549	133	279	473	828	120

	A ..	109	2	506	9	21	538	647	358	776	160	354	518	1,130	129
	B ..	237	1	1,044	51	206	1,302	1,539	1,140	2,180	128	192	1,268	2,372	271
	C ..	..	..	72	..	..	72	..	..	..	..	..	..	..	..
Total, unreserves ..		346	3	1,622	60	227	1,912	2,186	1,498	2,956	288	546	1,786	3,502	400
Circle total.	A ..	539	3	1,162	199	44	1,408	1,947	728	2,383	867	2,323	1,595	4,706	352
	B ..	518	4	2,406	416	251	3,077	3,595	2,740	5,949	196	433	2,936	6,382	659
	C ..	..	199	126	..	4	329	..	..	..	..	..	..	..	..
Grand Total ..		1,057	206	3,694	615	299	4,814	5,542	3,468	8,332	1,063	2,756	4,531	11,088	1,011

BELLARY CIRCLE.

Reserves.

Anantapur.	A ..	23	..	98	54	14	166	189	38	100	121	323	159	423	30
	B ..	34	..	139	106	23	265	302	221	424	9	22	236	446	72
	C ..	..	49	10	..	..	59	..	..	..	..	..	..	..	..
Total ..		57	49	247	160	37	493	491	259	524	130	345	389	869	102
Kurnool, East.	A ..	11	..	49	44	1	94	105	36	89	60	173	96	262	9
	B ..	22	..	94	99	14	207	229	177	554	9	16	186	570	43
	C ..	..	29	11	..	1	41	..	..	..	..	..	..	..	..
Total ..		33	29	154	143	16	342	334	213	643	69	189	282	832	52
Kurnool, South.	A ..	36	1	89	24	4	118	154	64	198	90	188	154	386	..
	B ..	27	2	233	51	12	298	325	248	717	..	..	248	717	77
	C ..	3	23	34	..	..	57	..	..	..	..	..	..	..	..
Total ..		66	26	356	75	16	473	479	312	915	90	188	402	1,103	77
Kurnool, West.	A ..	46	..	72	25	9	106	152	35	106	112	313	147	419	5
	B ..	18	..	245	120	26	391	409	271	704	11	41	282	745	127
	C ..	..	126	27	..	..	153	..	..	..	..	..	..	..	..
Total ..		64	126	344	145	35	650	561	306	810	123	354	429	1,164	132

A = Cases taken to court. B = Cases compounded. C = Cases undetected.

Note for Waltair Circle—

(*a*) Four cases relating to unreserves were erroneously included under reserves last year.

(*b*) Includes cases pending at the beginning of the year in the Gudem Agency Range brought forward to this return for the first time.

(*c*) Nine cases classified under (*c*) have been exoluded.

NOTE.—The differences between the closing balance of 1931-32 and the opening balance of 1932-33 are due to the transfer of cases from one head to another.

Return of Breaches of Forest Rules during 1932-33—*cont.*

District.		Cases pending from 1931-32.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new case of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
BELLARY CIRCLE—*cont.*															
Unreserves.															
Cuddapah, North.	A	112	1	305	169	37	512	624	220	947	365	967	585	1,914	39
	B	44	1	347	65	30	443	487	261	366	29	99	290	465	197
	C	..	..	32	..	..	32	..	..	..	..	..	..	..	..
	Total	156	2	684	234	67	987	1,111	481	1,313	394	1,066	875	2,379	236
Cuddapah, South.	A	25	2	156	93	4	255	280	70	153	183	431	253	584	27
	B	67	..	203	161	9	373	440	353	747	40	82	393	829	47
	C	..	..	27	..	..	27	..	..	..	..	..	..	..	..
	Total	92	2	386	254	13	655	720	423	900	223	513	646	1,413	74
Total, Reserves.	A	253	4	769	409	69	1,251	1,504	463	1,593	931	2,395	1,394	3,988	110
	B	212	3	1,261	602	114	1,980	2,192	1,531	3,512	98	260	1,629	3,772	563
	C	3	227	141	..	1	369	..	..	..	..	..	..	..	..
Grand Total, A, B and C Reserves.		468	234	2,171	1,011	184	3,600	3,696	1,994	5,105	1,029	2,655	3,023	7,760	673
Anantapur.	A	10	..	141	..	5	146	156	36	50	107	167	143	217	13
	B	73	3	297	..	31	331	404	356	672	2	2	358	674	46
	C	..	..	7	..	..	7	..	..	..	..	..	..	..	..
	Total	83	3	445	..	36	484	560	392	722	109	169	501	891	59
Kurnool, East.	A	1	..	3	..	..	3	4	1	1	3	7	4	8	..
	B	..	2	58	..	..	60	60	28	59	29	43	57	102	3
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	1	2	61	..	..	63	64	29	60	32	50	61	110	3

Kurnool, South.	A	..	2	..	10	..	3	13	15	5	9	9	13	14	22	1
	B	..	7	..	48	..	4	52	59	53	104	..	..	53	104	6
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total		..	9	..	58	..	7	65	74	58	113	9	13	67	126	7
Kurnool, West.	A	..	4	1	10	9	..	20	24	18	33	4	13	22	46	2
	B	..	..	..	62	4	..	66	66	64	103	..	..	64	103	2
	C	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
Total		..	4	1	73	13	..	87	90	82	136	4	13	86	149	4
Cuddapah, North.	A	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	39	..	..	39	39	39	50	..	..	39	50	..
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total		..	..	..	39	..	..	39	39	39	50	..	..	39	50	..
Cuddapah, South.	A	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	2	..	22	..	..	22	24	24	25	..	..	24	25	..
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total		..	2	..	22	..	..	22	24	24	25	..	..	24	25	..
Total, Unreserves.	A	..	17	1	164	9	8	182	199	60	93	123	200	183	293	16
	B	..	82	5	526	4	35	570	652	564	1,013	31	45	595	1,058	57
	C	..	..	..	8	..	..	8	..	..	..	..	..	..	..	..
Grand Total of Unreserves A, B & C.			99	6	698	13	43	760	851	624	1,106	154	245	778	1,351	73
Grand Total, Reserves and Unreserves.	A	..	270	5	933	418	77	1,433	1,703	523	1,686	1,054	2,595	1,577	4,281	126
	B	..	294	8	1,787	606	149	2,550	2,844	2,095	4,525	129	305	2,224	4,830	620
	C	..	3	227	149	..	1	377	..	..	..	..	..	..	..	..
Grand Total of Reserves and Unreserves A, B & C.			567	240	2,869	1,024	227	4,360	4,547	2,618	6,211	1,183	2,900	3,801	9,111	746

Note for Bellary Circle—

A = Cases taken to court. B = Cases compounded. C = Cases undetected.

NOTE.—The difference between the closing balance of 1931-32 and the opening balance of 1932-33 are due to the transfer of cases from one head to another.

Return of Breaches of Forest Rules during 1932-33—*cont.*

District.	Cases pending from 1931-32.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons	
SALEM CIRCLE.														
Reserves.														
Chittoor .. A ..	59	..	169	97	10	276	335	98	289	206	648	304	937	31
Chittoor .. B ..	60	..	198	145	24	367	427	331	550	19	52	350	602	77
Chittoor .. C ..	..	73	9	..	1	83	..	..	..	..	..	..	..	..
Total ..	119	73	376	242	35	726	762	429	839	225	700	654	1,539	108
Vellore, East. A ..	* 68	..	313	75	11	399	467	134	311	293	688	427	899	40
Vellore, East. B ..	* 158	..	515	189	6	710	868	612	1,048	9	18	621	1,066	247
Vellore, East. C ..	* 4	..	27	..	..	27	..	..	..	..	..	..	..	..
Total ..	230	..	855	264	17	1,136	1,335	746	1,359	302	606	1,048	1,965	287
Vellore, West. A ..	62	..	286	52	2	340	402	106	294	(a) 207	500	313	794	89
Vellore, West. B ..	49	1	230	34	4	269	318	245	433	17	34	262	467	56
Vellore, West. C ..	..	58	25	..	..	83	..	..	..	..	..	..	..	..
Total ..	111	59	541	86	6	692	720	351	727	224	534	575	1,261	145
Salem, North. A ..	* 15	..	94	39	3	136	151	27	69	† 115	185	142	254	9
Salem, North. B ..	* 22	..	221	87	14	322	344	284	471	21	49	305	520	39
Salem, North. C ..	..	7	3	..	..	10	..	..	..	..	..	..	..	..
Total ..	37	7	318	126	17	468	495	311	540	136	234	447	774	48
Salem, Central. A ..	* 324	..	681	86	123	890	1,214	216	477	694	1,387	910	1,864	304
Salem, Central. B ..	* 58	..	440	120	52	612	670	469	784	37	64	506	848	164
Salem, Central. C ..	..	40	29	..	..	69	..	..	..	..	..	..	..	..
Total ..	382	40	1,150	266	175	1,571	1,884	685	1,261	731	1,451	1,416	2,712	468

Salem, South.	A	..	* 111	..	399	40	11	450	561	259	566	186	367	415	933	118
	B	..	* 30	..	310	73	7	390	420	293	547	19	45	312	592	106
	C	..	..	35	27	..	..	62	..	..	..	..	..	..	..	..
	Total	..	141	35	736	113	18	902	981	552	1,113	205	412	757	1,525	224
Abstract for the Circle.	A	..	639	..	1,942	389	160	2,491	3,130	840	2,006	1,701	3,675	2,541	5,681	589
	B	..	377	1	1,914	648	107	2,670	3,047	2,234	3,833	122	262	2,356	4,095	691
	C	..	4	213	120	..	1	334	..	..	..	..	..	..	..	..
	Total	..	1,020	214	3,976	1,037	268	5,495	6,177	3,074	5,839	1,823	3,937	4,897	9,776	1,280
								Unreserves.							
Chittoor ..	A	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	142	1	2	145	145	145	215	..	..	115	215	..
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	..	..	142	1	2	145	145	145	215	..	..	145	215	..
Vellore, East.	A	..	..	..	356	25	2	383	383	70	152	313	596	383	748	..
	B	..	233	..	1,232	74	24	1,330	1,563	1,144	1,901	12	20	1,156	1,921	407
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	233	..	1,588	99	26	1,713	1,946	1,214	2,053	325	616	1,539	2,669	407
Vellore, West.	A	..	..	1	8	..	..	9	9	1	1	(b) 8	13	9	14	..
	B	..	27	1	37	..	3	41	68	62	107	2	3	64	110	4
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	27	2	45	..	3	50	77	63	108	10	16	73	124	4
Salem, North.	A	..	* 5	..	3	..	4	7	12	3	4	(a) 9	15	12	19	..
	B	..	* 15	..	96	..	80	176	191	171	263	2	4	173	267	18
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	20	..	99	..	84	183	203	174	267	11	19	185	286	18
Salem, Central.	A	..	* 25	..	65	..	1	66	91	60	143	24	31	84	174	7
	B	..	* 315	..	476	..	6	482	797	374	753	75	82	449	835	348
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	340	..	541	..	7	548	888	434	896	99	113	533	1,009	355

A = Cases taken to Court. B = Cases compounded C = Cases undetected.

Note for Salem Circle.—

* The difference between the closing balances of previous year and the opening balances of this year are due to transfer of cases from one head to another.

(a) Of these, compounding fees were collected in Court in 8 cases and 1 case was acquitted for want of evidence.

(b) Acquittals on payment of compounding fees in Court.

Return of Breaches of Forest Rules during 1932–33—*cont.*

District.		Cases pending from 1931–32.	New cases of the year.						Disposed of during the year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.	Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
SALEM CIRCLE—*cont.*															
***Unreserves*—cont.**															
Salem, South.	A	† 49	..	85	..	..	85	134	38	63	76	139	114	202	20
	B	† 175	4	646	..	6	656	831	499	729	120	188	619	917	212
	C	..	..	6	..	..	6	..	..	..	..	..	..	..	..
	Total	224	4	737	..	6	747	965	537	792	196	327	733	1,119	232
Abstract for the Circle.	A	79	1	517	25	7	550	629	172	363	430	794	602	1,157	27
	B	765	5	2,629	75	121	2,830	3,595	2,395	3,968	211	297	2,606	4,265	989
	C	..	..	6	..	..	6	..	..	..	..	..	..	..	..
	Total	844	6	3,152	100	128	3,386	4,224	2,567	4,331	641	1,091	3,208	5,422	1,016
COIMBATORE CIRCLE.															
Reserves.															
Kollegal.	A	14	4	115	43	11	173	187	50	107	118	268	168	375	19
	B	10	1	192	96	15	304	314	215	445	37	126	252	571	62
	C	..	124	11	..	1	136	..	..	..	..	..	..	..	..
	Total	24	129	318	139	27	613	501	265	552	155	394	420	946	81
Coimbatore, North.	A	118	..	284	44	8	336	454	84	311	197	532	281	843	173
	B	80	..	213	59	3	275	355	275	868	17	46	292	914	63
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	198	..	497	103	11	611	809	359	1,179	214	578	573	1,757	236
Coimbatore, South.	A	57	..	79	4	6	89	146	13	30	111	273	124	303	22
	B	..	..	110	27	12	149	149	123	263	12	41	135	304	14
	C	..	..	1	..	..	1	..	..	..	..	..	..	..	..
	Total	57	..	190	31	18	239	295	136	293	123	314	259	607	36

Madura ..	A ..	455	1	996	117	26	1,140	1,595	274	883	776	2,007	1,050	2,890	545
	B ..	33	4	454	84	27	569	602	276	510	27	104	303	614	299
	C ..	..	193	3	..	..	196	..	..	..	..	..	..	..	..
Total	..	488	198	1,453	201	53	1,905	2,197	550	1,393	803	2,111	1,353	3,504	844
Tinnevelly,	A ..	52	1	157	40	14	212	264	38	84	174	475	212	559	52
	B ..	56	..	217	76	14	307	363	..	..	288	581	288	581	75
	C ..	..	..	6	1	..	7	..	..	..	..	..	..	..	..
Total	..	108	1	380	117	28	526	627	38	84	462	1,056	500	1,140	127
Circle Total.	A ..	696	6	1,631	248	65	1,950	2,646	459	1,415	1,376	3,555	1,835	4,970	811
	B ..	179	5	1,186	342	71	1,604	1,783	889	2,086	381	898	1,270	2,984	513
	C ..	..	317	21	1	1	340	..	..	..	..	..	..	..	..
Total, Reserves	..	875	328	2,838	591	137	3,894	4,429	1,348	3,501	1,757	4,453	3,105	7,954	1,324

Unreserves.

Kollegal..	A ..	..	1	10	..	..	11	11	..	..	7	9	7	9	4
	B ..	6	2	42	1	2	47	53	39	57	..	..	39	57	14
	C ..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
Total	..	6	3	53	1	2	59	64	39	57	7	9	46	66	18
Coimbatore, North.	A ..	..	..	44	..	12	56	56	40	68	16	29	56	97	..
	B ..	12	3	87	..	47	137	149	109	186	..	..	109	186	40
	C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	12	3	131	..	59	193	205	149	254	16	29	165	283	40
Coimbatore, South.	A ..	..	..	1	..	..	1	1	1	3	..	..	1	3	..
	B ..	..	..	31	..	13	44	44	42	64	..	..	42	64	2
	C ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	32	..	13	45	45	43	67	..	..	43	67	2

A = Cases taken to court. B = Cases compounded and withdrawn. C = Cases undetected.

NOTE.—The difference between the closing balance of 1931-32 and the opening balance of 1932-33 is due to the transfer of cases from one head to another.

Note for Salem Circle—

* The differences between the closing balances of last year and the opening balances of this year are due to transfer of cases from one head to another.

† The difference between the closing balances of last year and the opening balances of this year are due to correct and full figures furnished by Revenue Divisional Officers this year.

Return of Breaches of Forest Rules during 1932-33—*cont.*

District.		Cases pending from 1931-32.	New cases of the year. Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.	Disposed of during the year. Convictions. Cases.	Convictions. Persons.	Acquittals. Cases.	Acquittals. Persons.	Total. Cases	Total. Persons.	Cases pending at close of year.
COIMBATORE CIRCLE—*cont.*															
Unreserves—cont.															
Madura	A	81	..	184	14	4	202	283	91	195	94	155	185	350	98
	B	126	..	314	3	31	348	474	310	388	22	25	332	413	142
	C	..	..	17	..	1	18	..	..	..	..	..	..	..	..
Total		207	..	515	17	36	568	757	401	583	116	180	517	763	240
Tinnevelly	A	6	..	48	..	22	70	76	13	22	31	49	44	71	32
	B	46	..	321	3	112	436	482	..	..	396	506	396	506	86
	C	..	..	2	..	..	2	..	..	..	..	..	..	..	..
Total		52	..	371	3	134	508	558	13	22	427	555	440	577	118
Circle Total	A	87	1	287	14	38	340	427	145	288	148	242	293	530	134
	B	190	5	795	7	205	1,012	1,202	500	695	418	531	918	1,226	284
	C	..	..	20	..	1	21	..	..	..	..	..	..	..	..
Total, Unreserves		277	6	1,102	21	244	1,373	1,629	645	983	566	773	1,211	1,756	418
,, Reserves		875	328	2,838	591	137	3,894	4,429	1,348	3,501	1,757	4,453	3,105	7,954	1,324
Grand Total		1,152	334	3,940	612	381	5,267	6,058	1,993	4,484	2,323	5,226	4,316	9,710	1,742

A = Cases taken to court. B = Cases compounded and withdrawn. C = Cases undetected.

NOTE.—The difference between the closing balance of 1931-32 and the opening balance of 1932-33 is due to the transfer of cases from one head to another.

OOTACAMUND CIRCLE.

Reserved Forests.

Mangalore, North	A	9	1	38	..	3	42	51	29	96	(*g*) 2 (*f*) 3	2 3	34	101	17
	B	56	1	153	33	14	201	257	206	376	(*d*) 6	18	212	394	45
	C	..	71	..	..	..	71	71	..	..	..	..	..	..	..
Total		65	73	191	33	17	314	379	235	472	11	23	246	495	62

Mangalore, South.	A	..	(e) 37	4	38	6	6	54	91	60	169	12	37	72	206	19
	B	..	49	11	99	51	23	184	233	132	280	(d) 75	128	207	408	26
	C	..	..	133	..	..	..	133	133	..	..	..	..	..	..	..
	Total	..	* 86	148	137	57	29	371	457	192	449	87	165	279	614	45
Wynad.	A	..	3	..	..	..	2	2	5	2	2	1 (d) 1	3 2	4	7	1
	B	..	9	1	3	6	5	15	24	15	19	(d) .. 1	3 1	17	26	7
	C	..	..	..	..	..	..	..	..	..	..	(g) 1 ..	3 ..	..	..	..
	Total	..	12	1	3	6	7	17	29	17	21	4	12	21	33	8
Nilambur.	A	..	(e) 7	1	..	12	..	13	20	19	28	..	..	19	28	1
	B	..	8	..	6	59	6	71	79	58	142	..	3	58	145	21
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	15	1	6	71	6	84	99	77	170	..	3	77	173	22
Palghat.	A	..	(e) 14	2	42	3	12	59	73	50	148	(g) 5	6	55	154	18
	B	..	19	1	179	39	47	266	285	234	481	(d) 21	37	255	518	30
	C	..	..	52	8	..	..	60	60	..	..	..	..	..	..	..
	Total	..	33	55	229	42	59	385	418	284	629	26	43	310	672	48
The Nilgiris.	A	..	4	..	2	2	14	18	22	18	39	4	10	22	49	..
	B	..	241	13	99	205	433	750	991	526	1,379	39	91	565	1,470	426
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	245	13	101	207	447	768	1,013	544	1,418	43	101	587	1,519	426
Total, Cootacamund Circle Reserves.	A	..	74	8	120	23	37	188	262	178	482	28	63	206	545	56
	B	..	382	27	539	393	528	1,487	1,869	1,171	2,677	143	284	1,314	2,961	555
	C	..	..	256	8	..	..	264	264	..	..	..	..	..	..	..
	Total	..	456	291	667	416	565	1,939	2,395	1,349	3,159	171	347	1,520	3,506	611

A = Cases taken to court. B = Cases compounded. C = Cases undetected.

(d) Cases withdrawn.

(e) Differences between the closing balance of 1931-32 and the opening balance of 1932-33 are due to the transfer of cases from one head to another.

(f) Acquitted by Magistrate after payment of compounding fees in Court.

(g) Acquitted by Magistrate for want of evidence.

* Two cases transferred to North Mangalore division. One case was transferred to the unreserves and included in the number of cases received during the year.

Return of Breaches of Forest Rules during 1932-33—*cont.*

District.		Cases pending from 1931-32.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
OOTACAMUND CIRCLE—*cont.*															
Unreserves.															
Mangalore, North.	A	(e) 18	..	43	..	4	47	65	26	29	(g) 2 (f) 14	3 18	42	50	23
	B	47	..	107	..	39	146	193	143	182	(d) 6	4	149	186	44
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	65	..	150	..	43	193	258	169	211	22	25	191	236	67
Mangalore, South.	A	(e) 89	124	11	..	..	135	224	102	134	6	6	108	140	116
	B	90	83	38	..	19	140	230	180	318	(d) 9	9	189	327	41
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	179	207	49	..	19	275	454	282	452	15	15	297	467	157
Wynad.	A	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	4	15	..	..	19	19	18	18	..	..	18	18	1
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	4	15	..	..	19	19	18	18	..	..	18	18	1
Palghat.	A	..	..	3	..	..	3	3	3	7	..	..	3	7	..
	B	7	..	97	..	23	120	127	95	137	16	20	111	157	16
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	7	..	100	..	23	123	130	98	144	16	20	114	164	16

Total, Unreserves, Ootacamund Circle.	A	..	107	124	57	..	4	185	292	131	170	22	27	153	197	139
	B	..	144	87	257	..	81	425	569	436	655	31	33	467	688	102
	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total		..	251	211	314	...	85	610	861	567	825	53	60	620	885	241
Total, Reserves and Unreserves, Ootacamund Circle.	A	..	181	132	177	23	41	373	554	309	652	50	90	359	742	195
	B	..	526	114	796	393	609	1,912	2,438	1,607	3,332	174	317	1,781	3,649	657
	C	..	..	256	8	..	..	264	264	..	..	..	..	..	..	..
Total		..	707	502	981	416	650	2,549	3,256	1,916	3,984	224	407	2,140	4,391	852
Total, Presidency Reserves.	A	..	2,092	19	5,118	1,259	354	6,750	8,812	2,810	7,103	4,743	11,657	7,053	18,760	1,789
	B	..	1,431	39	6,262	2,350	865	9,516	10,947	7,425	15,877	812	1,945	8,237	17,822	2,710
	C	..	7	1,212	344	1	7	1,564	1,571	..	..	..	..	..	..	..
Total		.	3,530	1,270	11,724	3,610	1,226	17,830	21,360	9,735	22,980	5,555	13,602	15,290	36,582	4,499
Total, Unreserves.	A	..	265	133	2,300	466	147	3,046	3,698	1,329	3,283	1,814	4,012	3,143	7,295	555
	B	..	1,630	106	6,512	739	762	8,119	9,749	6,566	12,023	917	1,358	7,483	13,381	2,266
	C	..	3	227	247	..	2	476	479	..	..	..	..	..	..	..
Total		..	2,285	466	9,059	1,205	911	11,641	13,926	7,895	15,306	2,731	5,370	10,626	20,676	2,821
Total of Reserves and Unreserves.	A	..	* 2,744	152	7,418	1,725	501	9,796	12,510	3,639	10,386	6,557	15,669	10,196	26,055	2,314
	B	..	* 3,061	145	12,774	3,089	1,627	17,635	20,696	13,991	27,900	1,729	3,303	15,720	31,203	4,976
	C	..	* 10	1,439	591	1	9	2,040	2,050	..	..	..	..	..	..	..
Grand Total, Presidency.			* 5,815	1,736	20,783	4,815	2,137	29,471	35,286	17,630	38,286	8,286	18,972	25,916	57,258	7,320

* Revised figures adopted.

A = Cases taken to court. B = Cases compounded. C = Cases undetected.

(*d*) Cases withdrawn.

(*e*) Differences between the closing balance of 1931-32 and the opening balance of 1932-33 are due to the transfer of cases from one head to another.

(*f*) Acquitted by Magistrate after payment of compounding fees in Court. (*g*) Acquitted by Magistrate for want of evidence.

ANNUAL FORM No. 31.

Forest Department, Madras Presidency.

Area of Forest Tracts protected from fire during the calendar year 1932.

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.
			Area attempted to be protected.	Fires.	Actually protected.	
	Waltair Circle.	ACS.	ACS.	ACS.	ACS.	RS.
Ganjam ..	Special protection ..	56,042	53,203	844	52,359	2,202
	General do. ..	211,881	207,714	12,774	194,940	1,687
	Total ..	267,923	(*a*) 260,917	13,618	247,299	3,889
Vizagapatam.	Special protection ..	78,838	78,605	4,011	74,594	268
	General do. ..	17,713	27,695	92	27,603	29
	Total ..	96,551	(*b*) 106,300	4,103	102,197	297
Parlakimedi.	General protection ..	111,442	112,875	1,649	111,226	388
Godavari, Upper.	Special protection ..	393,551	530,561	73,623	456,938	3,826
	General do. ..	1,136	1,140	..	1,140	..
	Total ..	394,687	531,701	73,623	458,078	3,826
Godavari, Lower.	Special protection ..	102,454	116,854	5,790	111,064	818
	General do. ..	108,491	109,564	2,307	107,257	302
	Total ..	210,945	(*c*) 226,418	8,097	218,321	1,120
Guntur ..	General protection ..	330,918	(*d*) 332,736	5,363	327,373	..
Nellore ..	Special protection ..	109,642	115,029	3,115	111,914	242
	General do. ..	122,972	123,949	53	123,896	..
	Total ..	232,614	238,978	3,168	235,810	242
Total, Waltair Circle.	Special protection ..	740,527	894,252	87,383	806,869	7,356
	General do. ..	904,553	915,673	22,238	893,435	2,406
	Grand Total ..	1,645,080	1,809,925	109,621	1,700,304	9,762
	Bellary Circle.					
Anantapur.	Special protection ..	34,755	13,397	91	13,306	38
	Early burning ..	18,562	3,924	15	3,909	41
	General protection ..	262,185	239,307	20,342	218,965	..
	Total ..	315,502	256,628	20,448	236,180	79
Kurnool, East.	Early burning ..	81,326	117,260	82	117,178	536
	General protection ..	510,543	487,314	29,667	457,647	200
	Total ..	591,869	604,574	29,749	574,825	736

Note for Waltair Circle—

(*a*) Excludes 139,152 acres of unprotected forests wherein an extent of 7,281 acres was burnt.
(*b*) Excludes 65,878 acres of unprotected forests wherein an extent of 489 acres was burnt.
(*c*) Excludes 110,960 acres of unprotected forests.
(*d*) Excludes 58,681 acres of unprotected forests, included in Repalle range.

NOTE.—No early-burning operations were undertaken.

Area of Forest Tracts protected from fire during the calendar year 1932—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report. Area attempted to be protected.	Fires.	Actually protected.	Cost during the year under report.
	Bellary Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS. A
Kurnool, South.	Special protection ..	..	2,300	605	1,695	28 0
	Early burning ..	165,982	204,299	1,560	202,739	442 0
	General protection ..	258,482	218,072	3,705	214,367	18 0
	Total ..	424,464	424,671	5,870	418,801	488 0
Kurnool, West.	Special protection ..	3,888	3,888	..	3,888	20 0
	Early burning ..	4,397	4,494	8	4,486	475 0
	General protection ..	514,632	538,433	54,492	483,941	756 0
	Total ..	522,917	546,815	54,500	492,315	1,251 0
Cuddapah, North.	Early burning ..	33,565	47,711	3,249	44,462	188 0
	General protection ..	279,620	550,059	40,578	509,481	131 0
	Total ..	313,185	597,770	43,827	553,943	319 0
Cuddapah, South.	Early burning ..	74,912	104,674	200	104,474	401 0
	General protection ..	319,213	324,507	19,883	304,624	409 0
	Total ..	394,125	429,181	20,083	409,098	810 0
Total, Bellary Circle.	Special protection ..	38,643	19,585	696	18,889	86 0
	Early burning ..	378,744	482,362	5,114	477,248	2,083 0
	General protection ..	2,144,675	2,357,692	168,667	2,189,025	1,514 0
	Grand Total ..	2,562,062	2,859,639	174,477	2,685,162	3,683 0
	Salem Circle.					
Chittoor ..	Special protection ..	37,505	38,423	1,846	36,577	408 1
	General do. ..	324,585	331,270	8,883	322,387	..
	Total ..	362,090	369,693	10,729	358,964	408 1
Vellore, East.	Special protection ..	94,001	100,998	1,522	99,476	292 8
	General do. ..	188,860	192,773	4,363	188,410	..
	Total ..	282,861	293,771	5,885	287,886	292 8
Vellore, West.	Special protection ..	* 83,613	132,181	5,223	126,958	500 5
	General do. ..	* 60,368	60,872	130	60,742	..
	Total ..	143,981	193,053	5,353	187,700	500 5
Salem, North.	Special protection ..	63,022	66,434	892	65,542	450 0
	General do. ..	272,887	296,561	52	296,509	..
	Total ..	335,909	362,995	944	362,051	450 0
Salem, Central.	Special protection ..	244,058	249,159	1,014	248,145	1,310 4
	General do. ..	204,579	206,432	764	205,668	..
	Total ..	448,637	455,591	1,778	453,813	1,310 4

* The areas protected in the previous year in the respective ranges are retained as the ranges did exist though the division itself did not exist in the previous year.

Area of Forest Tracts protected from fire during the calendar year 1932—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.
			Area attempted to be protected.	Fires.	Actually protected.	
	Salem Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS. A.
Salem, South.	Special protection ..	122,466	84,211	270	83,941	778 3
	General do. ..	38,068	79,888	252	79,636	..
	Total ..	160,534	164,099	522	163,577	778 3
Total, Salem Circle.	Special protection ..	644,665	671,406	10,767	660,639	3,739 5
	General do. ..	1,089,347	1,167,796	14,444	1,153,352	..
	Grand Total ..	1,734,012	1,839,202	25,211	1,813,991	3,739 5
	Coimbatore Circle.					
Kollegal..	Special protection ..	..	..	..	..	..
	Early burning ..	* 2,630	10,175	Nil.	10,175	180 0
	General protection ..	546,288	592,748	7,338	585,410	410 0
	Total ..	548,918	602,923	7,338	595,585	590 0
North Coimbatore.	Special protection ..	940	1,065	65	1,000	59 0
	Early burning ..	22,720	22,750	..	22,750	358 0
	General protection ..	490,643	507,104	4,212	502,892	1,047 0
	Total ..	514,303	530,919	4,277	526,642	1,464 0
South Coimbatore.	Special protection ..	4,932	38,262	700	37,562	1,846 0
	Early burning ..	90	82	..	82	55 0
	General protection ..	236,721	207,846	617	207,229	12 0
	Total ..	241,743	246,190	1,317	244,873	1,913 0
Madura ..	Special protection ..	85,374	89,492	2,562	86,930	1,944 0
	Early burning ..	128,100	129,223	829	128,394	810 0
	General protection ..	193,484	194,787	1,773	193,014	..
	Total ..	406,958	413,502	5,164	408,338	2,754 0
Tinnevelly.	Special protection ..	126,175	135,537	2,912	132,625	413 0
	Early burning ..	..	..	..	..	..
	General protection ..	104,666	107,400	3,564	103,836	..
	Total ..	230,841	242,937	6,476	236,461	413 0
Circle, Total.	Special protection ..	217,421	264,356	6,239	258,117	4,262 0
	Early burning ..	† 153,540	162,230	829	161,401	1,403 0
	General protection ..	1,571,802	1,609,885	17,504	1,592,381	1,469 0
	Grand Total ..	1,942,763	2,036,471	24,572	2,011,899	7,134 0
	Ootacamund Circle.					
Mangalore, North.	Early burning ‡ ..	2,823	..	..	..	..
	Special protection ..	67,060	68,765	29	68,736	552 0
	General do. ..	157,641	198,379	2,041	196,338	86 0
	Total ..	227,524	267,144	2,070	265,074	638 0

* Wrongly shown under special protection last year.
† Includes 2,630 acres wrongly shown under special protection last year.
‡ No early burning.

Area of Forest Tracts protected from fire during the calendar year 1932—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report. Area attempted to be protected.	Fires.	Actually protected.	Cost during the year under report. Rs.	A.
		Acs.	Acs.	Acs.	Acs.		
Ootacamund Circle—cont.							
Mangalore, South.	Special protection. *	282,628	249,697	7,089	242,608	900	0
Wynaad	Early burning ..	47,935	47,935	..	47,935	40	0
	Special protection.	114,760	112,646	2,567	110,079	1,108	0
	General protection.	7,507	7,530	8	7,522	..	
	Total ..	167,202	168,111	2,575	165,536	1,148	0
Nilambur ..	Special protection. *	80,284	80,289	37	80,252	3,518	0
The Nilgiris.	Special protection. *	86,936	87,574	335	87,239	2,546	0
	General do.	220,684	222,156	2,286	219,870	..	
	Total ..	307,620	309,730	2,621	307,109	2,546	0
Palghat ..	Special protection. *	114,184	116,772	573	116,199	2,511	0
	General do.	47,330	47,380	99	47,281	..	
	Total ..	161,514	164,152	672	163,480	2,511	0
Total, Ootacamund Circle.	Early burning ..	50,758	47,935	..	47,935	40	0
	Special protection.	742,849	715,743	10,630	705,113	11,135	0
	General do.	433,165	475,445	4,434	471,011	86	0
	Grand Total ..	1,226,772	1,239,123	15,064	1,224,059	11,261	0
Total, Presidency.	Special protection.	† 2,384,105	2,565,342	115,715	2,449,627	26,578	0
	Early burning ..	† 683,042	692,527	5,943	686,584	3,526	0
	General protection.	6,143,542	6,526,491	227,287	6,299,201	5,476	0
Grand Total, Presidency ..		† 9,110,689	9,784,360	348,945	9,435,415	35,579	0

* No early burning.
† Revised figures adopted.

ANNUAL FORM No. 32.

Forest Department, Madras Presidency.

Area closed and open to grazing during 1932-33.

Districts	Closed to all animals.		Open to grazing			
			Of all animals except goats.		Of all animals except browsers (sheep and goats).	
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.	Part of year
(1)	(2)	(3)	(4)	(5)	(6)	(7)
WALTAIR CIRCLE.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Reserved Forests.						
Ganjam	42	..	583	..	..	..
Parlakimedi	..	..	..	..	..	..
Vizagapatam	11	..	200	..	58	..
Godavari, Upper ..	21	..	810	..	..	..
Do. Lower ..	96	..	† 431	..	..	..
Guntur	57	..	218	..	337	..
Nellore	154	* 187	32	..	..	..
Total ..	381	187	2,274	..	395	..
Reserved Lands.						
Ganjam	..	..	109	..	..	..
Parlakimedi	4	..	172	..	..	..
Vizagapatam	..	..	..	..	..	..
Godavari, Upper ..	..	..	52	14	..	..
Do. Lower ..	..	..	63	24	..	..
Guntur	..	..	..	..	..	..
Nellore	..	..	..	..	..	..
Total ..	4	..	396	38	..	..
Grand Total ..	385	187	2,670	38	395	..
BELLARY CIRCLE.						
Anantapur	35	1	365	..	..	..
Kurnool, East	3	3	939	..	..	..
Do. South ..	34	..	630	..	..	..
Do. West	28	..	826	..	..	..
Cuddapah, North ..	52	..	882	..	..	..
Do. South ..	76	..	595	..	..	..
Total ..	228	4	4,237	..	..	..
SALEM CIRCLE.						
Reserved Forests.						
Chittoor	133	..	445	..	..	..
Vellore, East	25	..	442	..	..	..
,, West	10	..	292	..	..	..
Salem, North	9	22	536	..	..	..
Do. Central	28	..	621	..	..	..
Do. South	5	..	251	..	..	..
Total ..	210	22	2,587	..	..	..

* All kanchas are closed for three months during early rains to allow grass to grow.
† Includes 136 square miles of inaccessible areas.

Area closed and open to grazing during 1932–33—*cont.*

Districts.	Closed to all animals.		Open to grazing			
			Of all animals except goats.		Of all animals except browsers (sheep and goats).	
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.	Part of year
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS
SALEM CIRCLE—*cont.*						
Reserved Lands.						
Chittoor	..	..	..	..	..	..
Vellore, East	..	..	..	..	..	..
,, West	..	..	..	..	..	..
Salem, North	..	..	..	..	..	..
Do. Central	..	..	6	..	..	..
Do. South	..	..	30	..	..	..
Total ..	..	..	36	..	..	..
COIMBATORE CIRCLE.						
Kollegal	3	..	939	..	..	..
Coimbatore, North ..	25	..	805	..	..	..
Do. South ..	241	..	144	..	..	..
Madura	149	..	311	..	187	..
Tinnevelly	245	..	153	..	..	9
Total ..	663	..	2,352	..	187	9
OOTACAMUND CIRCLE.						
Reserved Forests.						
Mangalore, North ..	17	..	400	..	..	..
Do. South ..	22	..	367	..	..	..
Wynad	2	..	260	..	..	..
Nilambur	108	..	..	..	..	..
The Nilgiris	23	6	452	3	..	..
Palghat	147	..	96	..	10	..
Total ..	319	6	1,575	3	10	..
Reserved Lands.						
Mangalore, South ..	..	..	1	..	..	..
Nilambur	18	..	..	..	..	..
The Nilgiris	..	..	6	..	..	..
Total ..	18	..	7	..	..	..
Grand Total ..	337	6	1,582	3	10	..
Grand Total, Presidency—						
Reserved Forests ..	1,801	219	10,438	3	3,179	9
Reserved Lands ..	22	..	403	38	36	..
Total ..	1,823	219	10,841	41	3,215	9

ANNUAL FORM No. 33.

Forest Department, Madras Presidency.

Return of Grazing in the State Forests during 1932–33.

Districts.	Grazing on payment—Number of animals.									
	At enhanced or special rates.					At full rates.				
	Buffaloes.	Cows and bullocks.	Sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
WALTAIR CIRCLE.					RS.					RS.
Ganjam	..	..	..	..	..	(a) 6,214	(a) 39,636	(a) 397	..	9,799
Parlakimedi ..	..	..	..	..	..	(a) 2,295	(a) 3,267	(a) 750	..	1,544
Vizagapatam ..	(b) 224	(b) 2,866	(b) 20	..	1,662	(a) 180	(a) 5,296	(a) 107	..	1,071
Godavari, Upper.	..	..	..	..	..	..	..	..	..	..
Do. Lower.	(c) 6,353	(c) 3,883	(c) 80	..	6,237	(a) 290	(a) 5,471	..	..	(h) 1,342 1,135
Guntur	(g) 147	(g) 1,695	..	..	1,989	(b) 7,605 (c) 804	(b) 42,325 (c) 3,592	(b) 49,819 (e) 4,254	..	(b) 41,222 (c) 1,374 (h) 417
Nellore	..	..	..	..	..	193	1,428 (k) 30,207	311	..	936 (f) 22,314
Total ..	6,724	8,447	100	...	9,888	17,581	131,225	55,638	..	81,154
Unreserved Lands.										
Rampa	5,256	3,760	..	..	5,352	..	..	..	..	..
Grand Total ..	11,980	12,207	100	..	15,240	17,581	131,225	55,638	..	81,154

Return of Grazing in the State Forests during 1932-33—*cont.*

District.	Grazing on payment—Number of animals—*cont.*						Grazing free—Number of animals.										Grand total of value at full rates.
	At privileged rates.						By right under settlement.					During pleasure of Government or otherwise than under settlement.					
					Fees received.												
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Actual.	Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
					RS.	RS.					RS.					RS.	RS.	RS.
WALTAIR CIRCLE —*cont.*																		
Ganjam							(*a*) 453	(*a*) 2,213	..	..	585	387	4,458	206	..	1,000	1,585	11,384
arlakimedi							..	..	..	..	..	(*a*) 2,217	(*a*) 24,493	(*a*) 104	..	5,434	5,434	6,978
Vizagapatam							..	..	..	..	..	(*a*) 947	(*a*) 12,414	..	..	2,683	2,683	5,416
Godavari, Upper.	(*e*) 7,275	(*e*) 50,269	(*e*) 8,790	..	8,652	12,978	..	..	..	..	..	5,556	46,926	10	..	10,883	10,883	23,861
Do. Lower.	(*d*) 544	(*d*) 14,313	..	..	(*d*) 929	2,488	..	..	..	..	..	740	10,985	..	..	2,337	2,337	13,939
Guntur							..	..	..	..	..	..	..	..	..	..	..	45,002
Nellore							..	..	..	..	..	..	..	..	..	..	..	(*s*) 23,250
Total	7,819	64,582	8,790	..	9,581	15,866	453	2,213	..	..	585	9,847	99,276	320	..	22,337	22,922	1,29,830
Unreserved Lands																		
Rampa							..	..	..	..	..	..	..	..	..	..	..	5,352
Grand Total	7,819	64,582	8,790	..	9,581	15,866	453	2,213	..	..	585	9,847	99,276	320	..	22,337	22,922	1,35,182

Note for Waltair Circle—

(*a*) Six annas per buffalo, 3 annas per cow or bullock and 1 anna 6 pies per sheep.
(*b*) One rupee per buffalo, 8 annas per cow or bullock and 4 annas per sheep.
(*c*) Twelve annas per buffalo, 6 annas per cow or bullock and 3 annas per sheep.
(*d*) One anna per buffalo or cow.
(*e*) Four annas per buffalo, 2 annas per cow or bullock and one anna per sheep.
(*f*) Revenue realized by sale of Kanchas by auction. No permits are issued for Kanchas by department.
(*g*) One rupee per plough bull.
(*h*) Sale-proceeds of grass.
(*k*) Kancha revenue converted into number of cow units as per instructions in Chief Conservator's Proceeding No. 335, dated 5th December 1924.
(*s*) Excludes Rs. 86 relating to 1933-34 realized during 1932-33, and of an amount of Rs. 48 under E.M.D. wrongly credited to Revenue.

Abstract of animals permitted to graze on payment.

Buffaloes.	Cows and bullocks.	Sheep.	Total.
37,380	208,014	65,128	310,522

Return of Grazing in the State Forests during 1932-33—*cont.*

District.	Grazing on payment—Number of animals. At enhanced or special rates. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	At full rates. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Bellary Circle.										Rs.
Anantapur ..	..	..	..	..	..	(a) 489 (b) 1,298	(a) 17,094 (b) 11,528	(a) 20,082 (b) 8,646	.. ..	14,056 6,918
Kurnool, East.	..	..	..	..	..	(a) 3,094 (b) 4 Calves. (c) 715	(a) 16,923 (b) 210 Calves. (c) 9,812 (d) 60	(a) 35,764 ..	.. ..	19,723 54 11,372 30
Do. South.	..	..	..	..	..	(a) 3,983	(a) 11,733 (b) 1,817 Calves.	(a) 21,551 ..	.. ..	14,241 1,817
Do. West.	..	..	..	..	..	(a) 6,326 (b) 34	(a) 29,725 (b) 4,457	(a) 36,994 (b) 36	.. (c) 6	28,856 4,549
Cuddapah, North.	..	..	..	..	..	(a) 4,702	(a) 22,142 (b) 14,623	(a) 57,364 ..	.. ..	22,586 14,623
Cuddapah, South.	..	..	..	..	..	(a) 462	(a) 22,537 (b) 3,902	(a) 21,886 ..	.. ..	12,901 3,902
Total ..	..	..	..	..	..	21,107	166,563	202,582	6	1,55,628

Return of Grazing in the State Forests during 1932-33—*cont.*

District.	Grazing on payment—Number of animals—*cont.*						Grazing free—Number of animals.										Grand total of value at full rates.
	At privileged rates.						By right under settlement.					During pleasure of Government or otherwise than under settlement.					
					Fees received.												
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Actuals.	Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
BELLARY CIRCLE —*cont.*					RS.	RS.					RS.					RS.	RS.	RS.
Anantapur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20,974
Kurnool, East.	..	..	..	..	..	..	(*c*) 356	(*c*) 894	(*c*) 2,523	..	2,868	..	..	..	..	..	2,868	34,047
Do. South.	..	..	..	..	..	..	(*b*) 25	(*b*) 34	(*b*) 19	..	94	(*a*) 7	(*a*) 62	..	..	36	36	16,314
Do. West.	..	..	..	..	..	..	(*a*) 255	(*a*) 875	(*a*) 1,198	..	928	(*b*) 11	(*b*) 104	..	..	126	220	
Cuddapah, North.	..	(*c*) 280 (*d*) 94	..	..	58	140	..	..	..	..	..	(*a*) 80	..	..	..	60	60	37,409
Cuddapah, South.	..	..	..	..	..	..	..	(*a*) 533	..	..	200	..	..	..	..	..	200	17,003
Total ..	..	374	..	..	58	140	636	2,336	3,740	..	4,090	98	166	..	..	222	4,312	1,60,080

Note for Bellary Circle—

I. Anantapur—
- (*a*) Buffaloes at Re. 1 ; cows at 8 annas ; sheep at 4 annas.
- (*b*) Buffaloes at 12 annas ; cows at 6 annas ; sheep at 3 annas.

II. 3 Kurnool divisions—
- (*a*) Buffaloes at 12 annas ; cows at 8 annas ; sheep at 4 annas.
- (*b*) Buffalo calves at 6 annas ; cow calves at 4 annas.
- (*c*) Buffaloes at Rs. 2 ; cows at Re. 1 ; sheep at 8 annas.
- (*d*) Cow calves at 8 annas.
- (*e*) Penta horse at Re. 1.

III. 2 Cuddapah divisions—
- (*a*) Buffaloes at 12 annas ; cows at 6 annas; sheep at 3 annas.
- (*b*) Cows at Re. 1
- (*c*) Cows at 3 annas.
- (*d*) Cows at 1 anna.

Return of Grazing in the State Forests during 1932-33—*cont.*

District.	Grazing on payment—Number of animals.									
	At enhanced or special rates.					At full rates.				
	Buffaloes.	Cows and Bullocks.	Sheep.	Other animals.	Fees received.	Buffaloes.	Bullocks.	Sheep.	Other animals.	Fees received.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
					Rs.					Rs.
Salem Circle.										
Chittoor	..	..	..	..	..	(a) 69	14,545	5,745	..	8,778
Vellore, East	..	(c) 4,147	273	..	4,283	(b) 610	34,063	4,995	..	14,168
Do. West	..	(c) 524	..	..	524	(a) 162	29,050	11,070	..	17,455
Salem, North	..	..	..	..	..	(a) 241	21,353	3,730	..	11,850
						(c) 1,676	56,947	1,142	..	30,016
Do. Central	..	(c) 9,383	12	53	9,442	(f) 142	43,025	(b) 2,415	..	453
						(b) 379	..	8,484	..	26,717
Do. South	..	..	..	..	..	30	35,584	15,106	..	3,117
						(f) 14	21,178	1,155	2	18,112
						..	(b) 6,283	24,086	..	18,703
Total	..	14,054	285	53	14,249	3,323	2,62,028	2,433	..	2,812
								80,361	2	1,52,211

Return of Grazing in the State Forests during 1932-33—*cont.*

District.	Grazing on payment—Number of animals—*cont.*						Grazing free—Number of animals.										Grand total of value at full rates.
	At privileged rates.						By right under settlement.					During pleasure of Government or otherwise than under settlement.					
					Fees received.												
	Buffaloes.	Cows and bullocks.	Sheep.	Other animals.	Actual.	Value at full rates.	Buffaloes.	Cows and bullocks.	Sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
SALEM CIRCLE —*cont.*					RS.	RS.					RS.					RS.	RS.	RS.
Chittoor ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vellore, East ..	(*d*) 2,776	19,872	8,895	12	5,134	13,692	..	..	..	..	..	..	..	..	..	..	..	22,946
Do. West ..	(*b*) 6	186	41	..	82	109	..	..	..	..	..	..	..	..	..	..	..	35,430
	(*d*) 1,317	9,321	1,969	..	2,426	6,470	..	..	..	..	..	..	..	..	..	..	..	18,953
Salem, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30,469
Do. Central ..	..	12,618	..	..	(*g*) 1,577	7,098	..	..	..	..	..	..	..	..	..	..	..	64,516
Do. South ..	..	..	..	..	..	..	..	248	..	..	139	..	..	..	..	..	..	21,654
Total ..	4,099	41,997	5,905	12	9,219	27,369	..	248	..	..	139	..	..	..	..	..	..	1,93,968

Note for Salem Circle—

One buffalo = 2 cows = 4 sheep = 2 horses.

(*a*) Eight annas per cow unit.
(*b*) Six annas per cow unit.
(*c*) One rupee per cow unit.
(*d*) Three annas per cow unit.
(*e*) Twelve annas per buffalo, eight annas per cow, four annas per sheep.
(*f*) Nine annas a cow unit.
(*g*) Grazing assessment for 12,618 cow units at two annas per cow unit in Attur and Harur ranges.

Return of Grazing in the State Forests during 1932–33—*cont.*

Grazing on payment—Number of animals.

District.	At full rates.					At privileged rates.				Fees received.	
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Actual	Value at full rates.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
COIMBATORE CIRCLE.					RS.					RS. A. P.	RS. A. P.
Kollegal ..	4,683	83,027	5,710	(*e*) 1 elephant.	(*f*) 47,652	..	..	..	..	..	..
Coimbatore, North.	3,148	56,659	12,061	..	(*f*) 35,568	..	(*e*) 26	..	..	3 4 0	13 0 0
Coimbatore, South.	(*a*) 283	(*b*) 7,517	145	(*c*) 1 elephant.	4,159	..	..	..	..	..	..
Madura	160	30,000	5,795	..	22,544	..	..	..	..	..	..
Tinnevelly ..	345	11,224	7,699	..	(*f*) 7,942	..	..	..	..	..	..
Total ..	8,619	188,427	31,410	2	1,17,865	..	26	..	..	3 4 0	13 0 0

Return of Grazing in the State Forests during 1932-33—*cont.*

District.	Grazing free—Number of animals.											Grand total of value at full rates.
	By right under settlement.					During pleasure of Government or otherwise than under settlement.						
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
COIMBATORE CIRCLE—*cont.*					Rs.					Rs.	Rs.	Rs.
Kollegal	..	..	..	..	..	..	..	..	..	..	..	47,652
Coimbatore, North.	..	..	..	..	..	..	..	..	..	..	..	35,571
Coimbatore, South.	..	(*d*) 30	..	..	15	..	..	..	..	..	..	4,174
Madura	686	4,995	350	135	1,669	..	..	..	..	..	..	24,213
Tinnevelly	..	..	..	..	..	..	..	..	..	..	..	7,942
Total	686	5,025	350	135	1,684	..	..	..	..	..	..	1,19,552

Note for Coimbatore Circle—

(*a*) Includes 9 buffaloes at Rs. 2-8-0 each in Punachi Range instead of Re. 1 (one) only.
(*b*) Includes 21 bulls and cows at Rs. 2-8-0 each in Punachi Range instead of 8 annas each.
(*c*) One elephant in South Coimbatore and one in Kollegal at Re. 1 per day.
(*d*) Permission granted for free grazing of 30 bulls and cows within the Elumalayan koil enclosure.
(*e*) One-fourth fee for renewal of lost permits, i.e., at 2 annas per head.
(*f*) Includes Rs. 1-15-6 in Kollegal, Rs. 1,075 in North Coimbatore and Rs. 60 in South Coimbatore, realized by sale of fodder grass.

Note.—Full or nominal rates for Kollegal, North Coimbatore, South Coimbatore and Tinnevelly divisions, at Re. 1 per buffaloe, 8 annas per cow or bullock and 4 annas per sheep.

Madura district.—Part of Kodaikanal Range, at 8 annas a buffalo, 4 annas a cow or bullock and 2 annas a sheep.
Part of Kodaikanal, Palni, Cumbum, Sholavandan, Nattam and Ayyalur ranges excluding old Vaiyampatti Range at Rs. 1-8-0 a buffalo, 12 annas a cow or bullock and 6 annas a sheep.
Ayyalur Range portion (old Vaiyampatti Range), at Rs. 2 a buffalo, Re. 1 for a cow or bullock and 8 annas a sheep.

Return of Grazing in the State Forests during 1932-33—*cont.*

Grazing on payment—Number of animals.

District.	At enhanced rates.					At full rates.					At privileged rates.	
	Buffaloes.	Cows and bulls.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
OOTACAMUND CIRCLE.					Rs.					Rs.		
Reserved Lands.												
North Mangalore division						1,319	13,335			5,825		
South Mangalore division		(a) 17,275			1,080	2,088	15,681			7,185		
Wynaad division		(b) 5			25	1,955	8,487		(c) 1	3,714		
Nilambur division.												
Nilgiris division	19	518			278	8,042	14,008	2,281		5,856		
Do.		(f) 8,400	23,950		153							
Palghat division	4	1,237			1,245	65	4,323	1,797	(d) 111 (e) 2	2,761		
Total for Reserved lands	23	27,435	23,950		2,781	13,469	50,834	4,078	114	25,341		
Nilgiris division (unreserved lands)												

Return of Grazing in the State Forests during 1932–33—*cont.*

District.	Grazing on payment—Number of animals—*cont.*				Grazing free—Number of animals.											
	At privileged rates—*cont.*				By right under settlement.					During pleasure of Government or otherwise than under settlement.						
			Fees received.													
	Goats and sheep.	Other animals.	Actual.	Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
OOTACAMUND CIRCLE—*cont.*									Rs.					Rs.	Rs.	Rs.
Reserved Lands—cont.																
North Mangalore division ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5,825
South Mangalore division ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8,265
Wynaad division. ..	..	..	..	..	..	..	..	..	..	75	177	..	..	163	..	3,902
Nilambur division. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nilgiris division ..	..	..	..	..	..	..	..	..	..	246	232	..	..	136	..	6,423
Do. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palghat division ..	..	..	..	..	..	(*a*) 499	..	..	499	..	..	..	..	..	..	4,505
Total for Reserved lands ..	..	..	..	..	..	499	..	..	499	321	409	..	..	299	..	28,920
Nilgiris division (unreserved lands)	..	..	..	..	..	..	..	..	..	1,035	30	..	..	394	..	394

N B.—Footnotes for the references are printed at page 81.

Return of Grazing in the State Forests during 1932-33—*cont.*

District.	Grazing on payment—Number of animals.											
	At enhanced rates.					At full rates.					At privileged rates.	
	Buffaloes.	Cows and bulls.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
					Rs.					Rs. A. P.		
Total, Presidency Departmental Forests ..	6,747	49,936	24,335	53	26,918	64,099	799,077	374,069	124	5,32,199 0 0	11,918	106,979
Unreserves ..	..	5,256	3,760	..	5,352	..	..	..	..	..	..	..
Total, Panchayat Forests	997	12,145	6,006	..	13,623	17,690	280,584	423,855	24	2,75,696 0 0	3,386	12,397
Grand Total, Presidency.	7,744	67,337	34,101	53	45,893	81,789	1,079,661	797,924	148	8,07,895 0 0	15,304	119,376

Return of Grazing in the State Forests during 1932-33—*cont.*

District.	Grazing on payment—Number of animals—*cont.*				Grazing free—Number of animals.											
	At privileged rates—*cont.*				By right under settlement.					During pleasure of Government or otherwise than under settlement.						
			Fees received.													
	Goats and sheep.	Other animals.	Actual.	Value at full rates	Buffaloes.	Cows and bullocks.	Goats and sheep	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
			Rs.	Rs.					Rs.					Rs.	Rs.	Rs. A. P.
Total, Presidency Departmental Forests ..	14,695	12	18,861	43,388	1,775	9,822	4,090	534	6,997	10,266	99,851	320	..	22,858	27,234	6,32,360 0 0
Unreserves ..	..	..	..	..	..	..	..	..	..	1,035	30	..	..	394	..	5,746 0 0
Total, Panchayat Forests ..	24,424	..	12,867	14,275	..	1,011	410	..	684	77	224	..	..	71	..	3,04,349 0 0
Grand Total, Presidency.	39,119	12	31,728	57,663	1,775	10,833	4,500	534	7,681	11,378	100,105	320	..	23,323	27,234	9,42,455 0 0

Note for Ootacamund Circle.

	Buffaloes.	Cows and bulls.	Sheep and goat.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Full rates—			
North and South Mangalore division ..	0 10 0 each	0 6 0 each	..
Wynaad and Palghat	1 0 0	0 8 0	0 4 0
Nilgiris	0 6 0	0 8 0	0 1 6
Enhanced rates—			
Palghat	2 0 0	1 0 0	0 8 0
Nilgiris	1 0 0	0 8 0	..
Nilgiris slaughter cattle	..	0 8 0 per 50 per day.	0 1 6

(*a*) Includes buffaloes. Cattle admitted at the cattle fair at Kalgunda. Till the previous year the full amount at 2 annas per cattle was credited and half of it subsequently refunded to Taluk Board. Since this year, half collection at 1 anna per head of cattle was credited to Forest Department, and the other half to Taluk Board direct instead of subsequently refunding it.

(*b*) Includes buffaloes. Grazing in Mysore depot compound at Rs. 25 per year.

(*c*) Elephants.

(*d*) Asses.

(*e*) Free grazing to cattle of Irulars of Annaikatty—Paragraph 128 of working plan for Thadagam valley (Chief Conservator's Proceedings No. 294, Press, dated 22nd July 1931).

(*f*) Slaughter cows and sheep.

Abstract of animals permitted to graze on payments—

Buffaloes	13,492
Cows and bullocks	78,269
Goats and sheep	28,028
Other animals	114
	119,903

Abstract of Animals permitted to graze on payment in Reserved Forests and Reserved Lands.

Circle.	Buffaloes.	Bullocks and cows.	Sheep.	Other animals.	Total.
Waltair Circle ..	32,124	204,254	64,528	..	300,906
Bellary ,, ..	121,107	166,937	202,582	6	390,632
Salem ,, ..	7,422	318,327	86,551	67	412,367
Coimbatore ,, ..	8,619	188,453	31,410	2	228,484
Ootacamund ,, ..	33,492	78,269	25,028	114	119,903
Total, Departmental Forests	82,764	956,240	413,099	189	1,452,292
Panchayat Forests ..	22,073	305,126	454,285	24	781,508
Grand Total, Presidency	104,837	1,261,366	867,384	213	2,233,800

ANNUAL FORM No. 34-A.

Progress in afforestation and regeneration under Working Plans or Schemes during the year 1932-33.

ANNUAL

Forest Department,

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
WALTAIR CIRCLE.		YRS	ACS.		ACS.
Ganjam	Plains Sal Timber Working Circle.	1930-31 to 1939-40	1,859	Clear felling and natural regeneration	252
	Ravine Working Circle.	1930-31 to 1939-40	803	Clear felling and regeneration, partly natural and partly artificial.	165
Vizagapatam	Sal Working Circle.	1927-28 to 1961-62	681	Clear felling and natural regeneration.	(*b*) 110
Godavari, Lower ..	Kandikuppa Casuarina Plantation Working Circle.	1924-25 to 1933-34	696	Planting seedlings, 7' × 7'.	(*a*) 544
Nellore	Sriharikota Casuarina Plantation Working Circle.	1929-30 to 1938-39	550	Do.	162
		Total ..	4,589		1,233
BELLARY CIRCLE.					
Kurnool West Division.					
1. Gundlabrahmeswaram Range.	High Forest Working Circle, Gundlabrahmeswaram series.	10 years.	10 acres each year.	Clear felling and artificial regeneration.	25
2. Do.	....	..	..	Maintenance of nursery of teak.	..
3. Nandyal Range ..	High Forest Working Circle, Ramanapenta series.	10 years.	10 acres each year.	Clear felling and artificial regeneration.	25
4. Do. ..	....	..	..	Maintenance of nursery of teak.	..
				Total ..	50
SALEM CIRCLE					
Chittoor ..	Sandal Regeneration.	1st April 1932 to 31st March 1933.	102	Sandal seeds to be dibbled by subordinates.	40

Note for Waltair Circle—

(*a*) Correct area.

(*b*) Sal taungya has been tried as an experiment over an area of 4 acres in sal Coupe V of Palkonda range.

FORM No. 34-A.

Madras Presidency.

Plans or Schemes during the year 1932-33.

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
161	413	482	1,204	1,686	1,470	3,640	5,110	..	..	
88	253	449	718	1,167	1,467	1,497	2,964	..	..	
23	133	46	125	171	124	353	477	..	..	
79	623	1,016	743	1,759	12,617	3,284	15,901	2,569	6,369	
50	212	1,838	171	2,009	6,155	171	6,326	315	315	
401	1,634	3,831	2,961	6,792	21,833	8,945	30,778	2,884	6,684	
10	35	..	345	345	..	848	848	..	..	
..	..	37	..	37	133	..	133	..	..	
10	35	..	344	344	..	802	802	..	..	
..	..	63	..	63	153	..	153	..	..	
20	70	100	689	789	286	1,650	1,936	..	..	
102	508	..	..	..	..	..	..	..	..	

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
SALEM CIRCLE —*cont.*		YRS.	ACS.		ACS.
Chittoor—*cont.* ..	Timber Regeneration Compartment I Mamandur.	1st April 1932 to 31st March 1933.	20	Early burning, aeration of soil under red sander mother trees, sowing red sander seeds and cutting climbers.	702·1
	Total ..	..	122	..	1,108·1
Vellore, East ..	Virinchipuram ..	1888-89 to 1932-33.	Blanks in felled coupes.	Dibbling of seeds of timber species.	283
	Chenur	Do.	Do.	Do.	142
	Kilminnal	Do.	Do.	Do.	104
	Tiruvallam ..	Do.	Do.	Do.	111
	Total ..	..	..	..	640
Salem, Central.	Kurumbapatti palmyra tope.	16 years from 1926-27.	379	Sowing palmyra seeds.	139
	Jallutha	1927-28.	114	Felling of fuel coupes under simple coppice system. Sowing of seeds of indigenous species in blank areas.	114
	Chitteri Timber ..	1931-32—1932-33.	5	Planting stumps of teak, Pterocarpus marsupium, and rosewood.	
	Kottapatti Timber.	Do.	Small plot.	Sowing seeds of Terminalia arjuna, and mangifera indica along banks of streams and Hardwickia binata, Acacia ferrugenea, Anogeissus latifolia and Chloroxylon swietenia in coupes felled.	

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS/*	ACS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
20	722·1	749	..	749	2,773	..	2,773	..	..	
122	1,230·1	749	..	749	2,773	..	2,773	..	..	
..	283	..	..	370	9,552	..	58,539	794	48,500	
..	142	..	..	361	4,623	..	5,699	35	8,012	
..	104	..	..	186	3,157	..	27,841	2,457	38,850	
..	111	..	..	725	7,319	..	63,521	3,105	40,882	
..	640	..	..	1,642	24,651	..	1,55,600	6,391	*11,36,244	
30	169	120	..	120	626	..	626	740	2,104	
..	114	..	..	..	...	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	
2	5	..	..	..	..	..	..	..	..	

* Revised figures furnished by the District Forest Officer.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
		YRS.	ACS.		ACS
SALEM CIRCLE—*cont.*					
Salem, Central—*cont.*	Fuel	1931-32 to 1932-33.	Burnt patches.	Sowing seeds of principal fuel and timber species in burnt patches.	108
	Sandal	Do.	10 or 20	Sowing seeds of sandal above 2,000 feet contour by dumping method.	55
		Total ..	508	..	419
Salem, South ..	Timber coupes I to X of experimental regeneration block in coupe II. Jambuthu felling series.	1932-33 to 1941-42.	144	Sowing seeds of timber species in lines of 12 feet apart.	..
	Fuel	..	..	..	..
	Sandal coupes I to VI in 10 sandal series	1932-33 to 1937-38.	600	Direct sowing and planting seedlings of sandal and host plants raised in nursery.	..
	Total ..	..	744		..
	Grand Total ..	..	1,374		2,167·1
COIMBATORE CIRCLE.	..				
COIMBATORE, SOUTH.					
Regeneration area.	Mount Stuart Working Circle.	1919 ..	..	Clearing, burning and dibbling teak and other seeds.	29
		1921 ..	..		29
		1922 ..	..		126
		1923 ..	..		194
		1924 ..	..		226
		1925 ..	..		260
		1926 ..	..		251

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS	RS.	RS	RS.	RS.	RS.	RS.	RS.	RS.	
Not available.	(*a*) 108	..	..	..	....	..	..	..	..	
49	(*a*) 104	..	..	..	..	..	..	..	..	
81	500	120	..	120	626	..	626	740	2,104	
15	15	44	..	44	44	..	44	..	..	
..	..	..	..	..	..	..	..	..	..	
53	53	258	..	258	258	..	258	3,784	3,784	
68	68	302	..	302	302	..	302	3,784	3,784	
271	2,438·1	1,171	1,642	2,813	28,352	1,30,949	1,59,301	10,915	1,42,132	
..	29	..	..	..	643	826	1,469	..		
..	29	..	..	..	545	1,267	1,812	..	1,013	
..	126	..	..	..	3,358	4,303	7,661	..		
..	194	..	..	..	5,055	5,729	10,784	..		
..	226	..	..	..	6,459	4,883	11,342	..	205	
..	260	..	..	..	9,986	6,531	16,517	..	..	
..	251	..	507	507	15,251	2,305	17,556	..		

Note for Central Salem—

(*a*) Done free of cost by subordinates ; though the sowings were done in all these areas the result is not satisfactory as most of the seedlings died for want of rain.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period	Area to be regenerated during the period.	Method of treatment	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
COIMBATORE CIRCLE—*cont.*					
COIMBATORE, SOUTH —*cont.*		YRS.	ACS.		ACS
Regeneration area—*cont.*	Mount Stuart Working Circle.	1927 ..	..	Clearing, burning and dibbling teak and other seeds.	155
		1928 ..	..		148
		1929 ..	..		151
		1930 ..	..		224
		1931 ..	..		103
		1932 ..	..		92
		1933 ..	49		..
Waterfall Plantation.		..	..		12
Experimental Plantation at Mount Stuart.		1916 ..	..		5
Experimental Plantation at Karian shola.		..	..		1
Experimental Plantation at Topslip.		..	..		101
Planting Eucalyptus seedlings from nursery pits round Topslip.		..	..		..
Undersowing *Artocarpus Hirsuta*.		..	..		..
Formation of *Hopea* nurseries.		..	..		..
Gap regeneration area.		1931 ..	..		..
Do.		1932 ..	..		..
Do.		1933 ..	..		..
Nursery to provide plants for.		1932 ..	Planting ..		..
Do.		1933 ..	Do. ..		..
Do.		1934 ..	Do. ..		..
Ulandy Range.					
Gap regeneration ..		1932 ..	..		..
Do. ..		1933 ..	..		..

Note for Coimbatore Circle.

	RS.
Other expenditure during the year—	
Collection of seeds	149
Formation of inspection paths.	314
Planting sign boards	6
	469

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
..	155	..	..	..	5,405	5,360	10,765	..	..	
..	144	..	182	182	4,124	4,361	8,485	..	..	
..	151	..	236	236	4,133	4,394	8,527	..	..	
..	224	..	341	341	5,848	8,363	14,211	..	..	
..	103	..	726	726	4,134	2,943	7,077	..	..	
..	92	1,381	1,244	2,625	3,406	1,244	4,650	..	..	
49	49	520	..	520	520	..	520	..	..	
..	12	..	..	..	..	..	..	..	..	
..	5	..	..	..	..	78	78	..	167	
..	..	..	..	..	..	93	93	..	..	
..	10	..	..	..	31	..	31	..	..	
..	..	..	..	..	57	..	57	..	..	
..	..	..	..	..	22	..	22	..	..	
..	..	..	..	..	45	..	45	..	..	
..	..	..	13	13	743	13	756	..	..	
..	..	97	..	97	148	..	148	..	..	
..	..	24	..	24	24	..	24	..	..	
..	..	..	2	2	1,153	2	1,155	..	..	
..	..	401	..	401	611	..	611	..	..	
..	..	281	..	281	281	..	281	..	..	
		2,704	3,251	5,955	71,982	52,695	1,24,677	..	1,385	
..	..	401	..	..	598	..	598	..	..	
..	..	201	..	..	201	..	201	..	..	
		602	..	..	799	..	799	..	..	

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period. (3)	Area to be regenerated during the period. (4)	Method of treatment. (5)	Area on which regeneration was completed at the end of the previous year (6)
		YRS	ACS.		ACS.
COIMBATORE CIRCLE—*cont.*					
COIMBATORE, SOUTH —*cont.*					
Regeneration plots in coupes IX and X.	Punachi Working Circle.	..	..	..	5
Two-acre plot in compartment II.		..	..	..	2
Three-acre plot in compartment XV.		..	..	..	3
Regeneration area in compartments XIV and VI.		1924	..	..	25
Ten-acre plot in compartment XV.		..	..	..	10
Regeneration area in compartments XII and XIII.		1925	..	..	25
Periodic block regeneration area.		1926	..	..	25
Do.		1927	..	..	25
Do.		1928	..	..	25
Do.		1929	..	..	25
Do.		1930	..	..	25
Do.		1931	..	..	36
Do.		1932	..	..	25
Do.		1933	27	..	..
COIMBATORE, NORTH.					
Mettupalaiyam range.	Manaar Sandal Working Circle.	..	..	Dibbling sandal seeds.	132
Jaccaneri Sandal compartment	..	..	..	Do.	108
Minchuguly Podu regeneration.	..	..	..	..	..

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure up to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.			
..	5	..	..	..	86	128	214	..	..	
.	2	..	..	..	75	126	201	..	..	
..	3	..	..	..	146	98	244	..	..	
.	25	..	60	60	524	1,346	1,870	..	..	
..	10	..	..	..	245	404	649	..	..	
.	25	..	..	..	431	25	456	..	..	
..	25	..	12	12	327	155	482	..		
..	25	..	14	14	22	212	234	..	..	
..	25	..	18	18	185	161	346	..	..	
..	25	..	25	25	160	97	257	..	..	
..	25	..	76	76	200	174	374	..	..	
..	36	..	84	84	190	192	382	..	..	
..	25	116	116	232	251	116	367	..	..	
27	27	144	..	144	144	..	144	..	..	
		260	405	665	2,986	3,234	6,220	..	..	
..	132	..	..	..	69	75	144	..	..	
	108	..	..	..	30	..	30	..	..	
10	10	419	..	419	419	..	419	..	..	

* Excludes the following expenditure—

	RS.
Sandal sowing on either side of Aliar road	35
Climber cutting and rootwounding rosewood trees in compartment II.	10
Tending operations in compartments 7, 8 and 9	130
Collection of seeds	34
Total ..	209

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
COIMBATORE CIRCLE—*cont.*			ACS.		ACS.
MADURA.					
Vannathiparai Cumbum Valley experimental scheme.	..	5 years (1927-28 to 1932-33).	..	Artificial regeneration of teak, rosewood, etc.	23
TINNEVELLY.					
Kuttalam Working Circle, coupes VII and XIII.*	..	..	..	..	13
Total ..	..	..	76	..	2,544
OOTACAMUND CIRCLE.					
Mangalore, North.	Catechu Working Circle—				
	Baindur coupes I and II.	1926-27	375 acres of coupe I of Baindur.	Fencing and sowing Acacia sundra and at stakes in filled pits 1' × 1' × 10".	120 acres (51 acres in coupe I and 69 acres in coupe II).
	Baindur coupe III.	1927-28	580	Do.	75
	Baindur coupe III.	1928-29	550	Do.	13½
	Wandse coupe III.	1928-29	1,030	Do.	40 acres in Mudare gudda reserved forest and 36 acres in Honnukoddu reserved forest.
	Wandse coupe IV.	1929-30	1,470	Do.	34
	Baindur coupe V.	1931-32	33	Do.	33
	Baindur coupes V and VI.	1931-32	36	Do.	36

* Omitted in last year's return.

Plans or Schemes during the year 1932–33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
..	23	..	148	148	1,296	515	1,811	..	3,753	
..	13	..	..	..	105	..	105	..	..	
86	2,630	3,985	3,804	7,789	77,686	56,519	1,34,205	..	5,138	
..	120	..	9	9	352	468	820	..	..	
..	75	..	10	10	396	428	824	..	..	
..	13½	..	..	..	86	103	189	..	..	
..	40	..	20	20	229	114	373	..	..	
..	36	..	22	22	211	156	367	..	..	
..	34	..	20	20	307	99	406	..	..	
..	33	..	42	42	180	42	222	..	..	
..	36	..	47	47	197	47	244	..	..	

Progress in afforestation and regeneration under Working

Division	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.*			ACS.		ACS.
Mangalore, North —*cont.*	Catechu Working Circle—*cont.*				
	Herur reserved forest.	1932-33	5	Cutting lines 3' wide and 2' apart from pitting 1' × 1' × 6" and sowing.	..
	Clear Felling Working Circle—				
	Megani valley coupe I.	1932-33 and 1933-34	20	Clearing and burning.	..
	Plantation Working Circle—				
	Someshwar reserved forest.	1920-21 and 1927-28	659	Sowing of Hopea wild jack and Dhupa in prepared patches.	659
	Jatkatmale reserved forest.	1920-21 and 1921-22.	1,139·10	Sowing of Hopea and Dhupa.	1,139·10
	Halesomeshwar reserved forest.	1922-23, 1924-25 and 1926-27.	1,744	Do.	1,744
	Total ..	..	7,641·10	..	3,929·10
Mangalore, South	Timber Working Circle—Kasaragod felling series—Partially regenerated group—				
	Alletti west reserved forest (Devaxaji compartment 8).	1929-30 and 1930-31.	232	Natural regeneration of Hopea over 76 acres and artificial regeneration with Hopea and Artocarpus over 156 acres.	232

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS	ACS.	RS.	RS.	RS.	RS.	RS.	RS.			
5	5	37	..	37	37	..	37	..	..	
20	20	423	..	423	423	..	423	..	..	
..	659	..	360	360	2,593	2,289	4,882	..	..	
..	1,139·10	..	359	359	3,122	6,046	9,168	..	..	
..	1,744	..	239	239	7,264	5,582	12,836	..	..	
25	3,964·10	460	1,128	1,588	15,387	15,404	30,791	..	..	
..	232	..	..	..	912	65	977	..	..	

* Tending by beat guard free

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.*		YRS.	ACS.		ACS.
Mangalore, South—*cont.*	Timber working circle—Kasaragod felling series—Partially regenerated group—*cont.*				
	Alletti east reserved forest (Kurlekadu), compartment 2.	1930-31	12	Natural regeneration of Hopea.	12
	Alletti east reserved forest (Chonapadimalai).	1931-32	63	Artificial regeneration of Hopea mainly and Ayini over 23 acres and natural regeneration of Hopea over 40 acres.	63
	Puttur felling series A—Partially regenerated group—				
	Nalkur reserved forest, compartment 1 (Kattamarbettu).	1925-30	1,106	Natural regeneration of existing Hopea.	1,106
	Uppinangady felling series—Partially regenerated group—				
	Mujur reserved forest, compartment 1, coupe XIV.	1930-31	166	Artificial regeneration of Hopea mainly and with teak and vengai.	166
	Mujur reserved forest, compartment 1, coupe XV.	1931-32	83	Artificial regeneration by Hopea mainly and Artocarpus hirsuta.	83

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.		RS.	RS.	RS.	RS.	RS.			
12	..	..	..	..	..	36	36	..	..	
63	..	11	11	212	11	223	..	..		
1,106	..	..	..	..	..	8,730	8,730	..	..	
166	..	22	22	275	72	347	..	..		
83	..	23	23	..	132	23	155	..	..	

* Area revised on actual survey.
† Revised area as per working plan.
‡ Revised area as per actual survey.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.*		YRS.	ACS.		ACS.
Mangalore, South—*cont.*	Puttur felling series—Group to be regenerated—				
	Nalkur reserved forest, compartment 1, coupe I.	1932-33	191	Natural regeneration of evergreen species.	..
	Jalsur East reserved forest.	1926-27	189	Do.	189
	Plantation working circle—Plantations—				
	Parappa reserved forest, compartment 5.	1930-31	30	Artificial regeneration of teak.	30
	Parappa reserved forest, compartment 6.	1924	16	Artificial regeneration of teak, etc.	16
	Parappa reserved forest, compartment 8.	1926-27	23	Do.	23
	Parappa reserved forest, compartment 9.	1929	16	Artificial regeneration of Artocarpus and Melia dubia.	16
	Sampaje reserved forest, coupe II.	1930-31	22·50	Artificial regeneration with teak.	22·50
	Sampaje reserved forest, coupes III and IV.	1931-32	16·25	Do.	16·25
	Alletti West old teak kumries.	..	87	Do.	..
	Medinadka West old teak kumries,	..	47	Do.	..

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS		RS.	RS.	RS.	RS.	RS.			
191	191	..	111	111	..	111	111	..	..	
..	189	..	..	..	289	4,778	5,067	..	..	
..	30	..	29	29	900	514	1,414	..	..	
..	16	..	6	6	99	129	228	..	..	
..	23	..	..	..	407	275	682	..	..	
..	16	..	24	24	617	219	836	..	..	
..	22·50	..	44	44	948	249	1,197	..	..	
..	16·25	..	68	68	598	75	673	..	..	
87	87	..	10	10	..	10	10	..	..	
47	47	..	10	10	..	10	10	..	..	

* Revised area as per working plan.
† Revised area as per survey.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
		YRS.	ACS.		ACS.
OOTACAMUND CIRCLE—*cont.*					
Mangalore, South—*cont.*	Plantation working circle—Plantations under shelterwood—				
	Parappa reserved forest, compartments 1 and 2.	1922-25	526	Artificial regeneration with evergreen species.	526
	Parappa reserved forest, extensions 1 and 2.	1922-25	47	Do.	47
	Parappa reserved forest, compartment 3.	1922-25	188	Do.	188
	Parappa reserved forest, compartment 4.	1922-25	171	Do.	171
	Parappa reserved forest, compartment 5.	1922-25	113	Do.	113
	Parappa reserved forest, compartment 6.	1922-25	230	Do.	230
	Parappa reserved forest, compartment 7.	1922-25	239	Do.	239
	Parappa reserved forest, compartment 8.	1922-25	206	Do.	206
	Parappa reserved forest, compartment 9.	1922-25	140	Do.	140
	Parappa reserved forest, compartment 10.	1922-25	195	Do.	195
	Total of compartments 1 to 10.	..	2,055	..	2,055

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	ACS.		RS.	RS.	RS.	RS.	RS.			
..	526	..	..	..	..	..	..	..	..	
..	47	..	18	18	..	..	..	..	..	
..	188	..	117	117	..	..	..	..	..	
..	171	..	104	104	..	..	..	..	..	
..	113	..	109	109	..	..	..	..	..	
..	230	..	..	..	..	..	..	..	..	
..	239	..	106	106	..	..	..	..	..	
..	206	..	116	116	..	..	..	..	..	
..	140	..	64	64	..	..	..	..	..	
..	195	..	78	78	..	..	..	..	..	
..	2,055	..	712	712	5,456	6,659	12,115	..	..	

Progress in afforestation and regeneration under Working

Division	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.*		YRS.	ACS.		ACS.
Mangalore, South—*cont.*	Plantation working circle—Plantations under shelterwood—*cont.*				
	Mandikole reserved forest.	1931-32	57	Artificial regeneration with Hopea and Ayini.	57
	Jalsur East reserved forest, compartments 1 and 2.	1919 and 1921-22.	252	Artificial regeneration of Hopea undergrowth existing.	252
	Porkala reserved forest, compartment 1.	1920-21	217	Artificial regeneration with evergreen species, mainly Hopea.	217
	Do.	1921-22	20	Do.	20
	Do.	1922-23	475	Do.	475
	Do.	1924-25	50	Do.	50
	Padnur reserved forest, compartment 1.	1920-21	204	Do.	204
	Do.	1921-22	30	Do.	30
	Do.	1922-23	409	Do.	409
	Total of Porkala and Padnur reserved forests.	..	1,405	..	1,405
	Mundaje kap reserved forest, compartments 1 and 2.	1926-27	277	Artificial regeneration of Hopea.	277
	Do.	1927-28	132	Do.	132
	Clear felling experimental working circle—				
	Thodikan felling series, coupe I.	1933-34	11·50	Artificial regeneration with teak.	..

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks
		Creation.	Tending	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	ACS.	RS.	RS.	RS.	RS.	RS.	RS.			
..	57	..	16	16	182	16	198	..	..	
..	252	..	..	..	1,541	2,695	4,236	..	..	
..	217	..	75	75	..	..	..	..	..	
..	20	..	18	18	..	..	..	..	..	
..	475	..	..	..	..	..	..	..	..	
..	50	..	..	..	..	..	..	..	..	
..	204	..	88	88	..	..	..	..	..	
..	30	..	12	12	..	..	..	..	..	
..	409	..	..	..	..	..	..	..	..	
..	1,405	..	193	193	6,520	7,177	13,697	..	..	
..	277	..	220	220	1,725	960	2,685	..	..	
..	132	..	..	..	624	297	921	..	..	
..	..	109	..	109	109	..	109	..	..	

* Revised area as per working plan.
† Climber cutting done free of cost by subordinates.
‡ Tending done by forest guards free of cost.
§ Climber cutting done free of cost.
‖ Regeneration to be done in 1933-34.

Progress in afforestation and regeneration under Working

Division	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.*		YRS.	ACS.		ACS.
Mangalore, South—*cont.*	Clear felling experimental working circle—*cont.*				
	Adoor felling kumrie series, coupe I (*a*).	1932-33	31	Artificial regeneration with teak.	...
	Adoor felling kumrie series, coupe I (*b*).	1932-33	35·25	Artificial regeneration with teak and rosewood.	..
	Aletti kumrie felling series, coupe I.	1932-33	36	Artificial regeneration with teak.	..
	Bantamale felling series, coupe I.	1933-34	10	Do.	..
	Fuel working circle —Muliar-Karadka felling series—	..	..	..	..
	Muliar reserved forest, coupe XIX, old.	1932-33	53	Artificial regeneration in blanks and patches and tending natural regeneration.	..
	Hopea improvement working circle—				
	Devachalla reserved forest, coupe I.	1933-34	100	Tending of natural hopea.	..
	Dharmastala Mundaje reserved forest, coupe I.	1933-34	115	Do.	..
	Total ..	..	6,869·50	..	6,152·75

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.	
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.				
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	
ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.				
31	31	264	..	264	264	..	264	..	..		
35·25	35·25	556	..	556	556	..	556	..	..		
36	36	408	..	408	408	..	408	..	..		
..	..	104	..	104	104	..	104	..	..		
53	53	..	29	29	..	29	29	..	..		*
..	..	..	7	7	..	7	7	..	..		†
..	..	..	10	10	..	10	10	..	..		†
480·25	6,633	1,441	1,545	2,986	22,878	33,157	56,035	..	..		

* Artificial regeneration to be done in 1933-34.

† Actual tending work will be done in 1933-34. The amount shown relates to expenses incurred for demarcation.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont*		YRS.	ACS.		ACS.
Wynaad	Experimental working circle, Begur and Chedleth ranges.	1892-93 to 1929-30	(*a*) 1,551	Regular planting or Taungya planting.	1,392·50
	Cultural operations in Begur and Chedleth ranges.	No specific prescription in the working plan.	..	Patch regeneration by dibbling seeds	227
	Clear-felling working circle in Begur and Chedleth ranges.	1929-30 to 1938-39	(*a*) 1,500*	Concentrated regeneration by stump planting.	298
	Selection felling working circle, felling series I and III, Begur and Chedleth ranges.	1929-30 to 1938-39	(*a*) 6,924*	Patch regeneration by dibbling and strip planting.	(*e*) 1,318
	Selection felling working circle, felling series I.	No specific prescriptions in the working plan.	..	Taungya planting.	(*h*) 35·50
	Improvement felling working circle in Sultan's Battery range.	Do.	..	Taungya planting and dibbling.	(*i*) 10·40
	Do.	Do.	..	Patch planting and dibbling.	2
	Ponam working circle in Kannoth range.	Plantations opened before the introduction of the working plan between 1876 and 1926.	..	Regular planting and Taungya planting.	† 627
	Do.	Cultural operations in Ponam working circle conducted before introduction of the working plan.	..	Patch regeneration by dibbling Aijini at Kannoth in 1927.	4

* Planting to be completed only by 1938-39.

Plans or Schemes during the year 1932-33—*cont.*

(7) Area regenerated during the year.	(8) Total area regenerated to the end of the year.	Expenditure during the year. (9) Creation.	(10) Tending.	(11) Total including tending and upkeep.	Expenditure to the end of the year. (12) Creation.	(13) Tending.	(14) Total including tending and upkeep.	(15) Revenue during the year.	(16) Total revenue to the end of the year.	(17) Remarks.
ACS.	ACS.	RS	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
..	1,392·50	..	1,407	1,407	58,386	58,381	1,16,767	5,116	39,309	
(*b*)	227	..	..	..	1,924	160	2,084	..	..	
(*c*)78·50	376·50	(*d*)3,655	2,890	6,545	21,183	4,961	26,144	..	..	
(*f*)	1,318	(*g*) 283	157	440	1,182	169	1,351	..	..	
..	35·50	..	177	177	177	417	594	..	..	
..	10·40	..	13	13	107	141	248	..	..	
..	2	..	22	22	67	130	197	..	..	
..	627	..	6	6	(*i*) 2,186	(*k*)10,771	12,957	..	5,832	
..	4	..	..	..	11	12	23	..	..	

† In the case of some of the old plantations at Kannoth there are some differences in the areas noted in the working plan and in the plantation journal. They are being reconciled. Pending reconciliation the areas noted in the return for 1931-32 (Form 34-B) are adjusted here.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.*		YRS.	ACS.		ACS.
Wynaad—*cont.*	Ponani working circle in Kannoth range.	1933-34 to 1942-43	(*a*) 424*	Tungya planting and dibbling.	..
	Selection working circle in Kannoth range.	Cultural operations in selection working circle carried out before introduction of working plan in 1930-31.	.. ..	Patch regeneration by dibbling and planting.	† 2,452
	Do.	1932-33 to 1941-42	(*a*) 8,508 ‡	Do.	
	Total ..		18,907		6,366·40
Nilambur	Plantation working circle.	1928-29 to 1937-38	1,289·9	Artificial ..	704·1
	Conversion working circle.	Do.	2,209	Do. ..	716·6
	Beypore coconut tope.	1932-33	..	..	..
	Total ..		3,498·9		1,420·7
The Nilgiris ..	Mudumalai clear-felling working circle.	1927 to 1937	300	Artificial regeneration of teak.	97·5
	Do.	Do.	105 (one-acre plot).	Dibbling sandal seed.	11
	Sandal area, Segur range.	..	..	Do.	
	Sandal area, Coonoor range.	1932-33	1	Do.	

* Planting to be completed only by 1942-43.
† Only selected gaps were regenerated.
‡ Planting to be completed only by 1941-42 in selected gaps

Plans or Schemes during the year 1932–33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
..	..	(*l*) 188	..	183	(*m*) 192	..	192	..	..	
..	2,452	..	53	53	285	89	374	..	..	
350 gaps in an area of 608 acres in selection coupe I. part.	680	(*n*) 246	..	246	246	..	246	..	..	
758·50	7,124·90	4,372	4,725	(*o*) 9,097	85,946	75,231	1,61,177	5,116	45,141	
72·8	776·9	3,417	..	3,417	26,216	..	26,216	..	..	
177·5	894·1	6,337	..	6,337	48,784	..	48,784	..	..	
..	..	..	686	686	884	18,165	19,049	..	..	
250·3	1,671	9,754	686	10,440	75,884	18,165	94,049			
40	137·5	1,969	347	2,316	7,021	949	7,970	118	2,567	
15	26·0	89	57	146	313	134	447	..	..	
..	80	..	..	..	201	68	269	..	..	
..	81	14	..	14	263	68	331	..	..	

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.*		YRS.			ACS.
The Nilgiris—*cont.*	Nilgiris plantations and Aramby, Block V, compartment 17 B.	1932-33	..	Dibbling sandal seed.	3·7
	Baikie, Block IV, compartment I.	..	..	..	1·5
	Snowdon, Block III, compartment 2 B.	..	..	..	4·5
	Snowdon, Block III, compartment 3.	..	..	..	1
	Brooklands, compartment 3.	..	..	Artificial regeneration by planting *Eucalyptus engineides.*	5
	Springfield, compartment 2.	..	..	Do.	5·2
	Springfield, compartment 3.	..	..	Do.	5·2
	Springfield, compartment 4.	..	..	Do.	5·8
	Springfield, compartment 5.	..	..	Do.	5·8
	Coonoor Peak, Block II, compartment 2 A.	..	..	Artificial regeneration by planting *Eucalyptus globulus.*	3·2
	Governorshola, Block IV, compartment 4.	..	..	Do.	6·4

(*a*) Total area provided in the working plan.

(*b*) Patch regeneration done in Begur and Chedleth ranges from 1914-15 to 1921-22. Shown in this form as the patches lie in the area covered by the working plan.

(*c*) The area of 1932 plantation compartment 6, Chedleth was on actual survey found to be only 35 acres though it was taken as 40 acres in the return for 1931-32 (column 11).

(*d*) Includes Rs. 744 cost of nursery and Rs. 1,866 cost of rubbish felling, burning, etc., over 101 acres of 1933 regeneration area in Begur and Chedleth ranges.

(*e*) The area of selection coupe I, Boothakkal, Begur range, was on actual survey found to be 325 acres though it was taken as only 260 acres in the selection for 1931-32 (column 8).

(*f*) During 1932-33, some new patches in selection coupe I alone in both Begur and Chedleth ranges were regenerated instead of taking up selection coupe III as fellings in selection coupe III were not complete during 1932-33. The areas of selection coupes I in both the ranges have already been included in the area noted in column 6 and so not shown again in column 7.

(*g*) Includes Rs. 166 spent during 1932-33 for preparing patches in selection coupes III in Begur and Chedleth ranges (240 plus 191) 431 acres.

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	ACS.		RS.	RS.	RS.	RS.	RS.			
..	3·7	..	..	..	95	12	107	..	..	
..	1·5	..	..	..	27	..	27	..	..	
..	4·5	..	..	..	4	..	4	..	..	
..	1	..	..	..	10	..	10	..	..	
..	5	..	..	..	211	33	244	..	..	
..	5·2	..	..	..	45	28	173	..	..	
..	5·2	..	22	22	141	45	186	..	..	
..	5·8	..	8	8	120	37	157	..	..	
..	5·8	..	8	8	125	38	163	..	..	
..	3·2	..	..	..	36	..	36	..	..	
..	6·4	..	..	..	52	..	52	..	..	

(*h*) The area of 1930 Belagole tuckle is only 28·50 acres but was taken as 29 acres wrongly in arriving at the area noted in column 8 of the return for 1931-32.

(*i*) The area of 1930 Muthanga sandal plantation is 1·40 acres but was wrongly taken as only 1 acre in arriving at the area noted in column 8 of the return for 1931-32.

(*j*) Inclusive of Rs. 10 on one experimental plantation charged to 8 (*b*) F. Other charges—Voted—Miscellaneous.

(*k*) Inclusive of Rs. 16 on one experimental plantation charged to 8 (*b*) F. Other charges—Voted—Miscellaneous.

(*l*) Represents expenditure during 1932-33 on nursery opened for 1933-34 planting in Tungya coupe I.

(*m*) Includes Rs 4 spent during 1931-32 for laying out Tungya coupe I.

(*n*) Includes Rs. 62, cost of nursery opened for 1933 gap regeneration.

(*o*) The total expenditure under 8 (*b*) E. (1) Regeneration during 1932-33 is Rs. 9,320. An expenditure of Rs. 223 towards supply of seeds to other divisions, repairs to coolie lines, fencing botanical garden, etc., has been exoluded rom this statement.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.*		YRS.			ACS.
The Nilgiris—*cont.*	Governorshola, Block IV, compartment 1.	..	..	Artificial regeneration by planting *Eucalyptus globulus.*	10
	Cairnhill, Block I, compartment 9 (*b*) i.	..	..	Do.	3·4
	Maslimund, Block III, compartment 1.	..	..	Do.	3·7
	Aramby, Block VII, compartment 3 (*a*).	..	..	Do.	3
	Brooklands, compartment 4.	..	..	Do.	5·3
	Coonoor Peak, Block II-2, compartment 2 B.	1932-33 ..	..	Do.	3·2
	Tigerhill reserved forest.	Do. ..	..	Do.	12
	Bleakhouse, compartment 1.	Do. ..	..	Artificial regeneration by planting *Eucalyptus pillularis.*	7·6
	Aramby, Block VII, compartment 3 (*b*).	Do. ..	..	Artificial regeneration by planting *Eucalyptus globulus.*	3
	Cairnhill, Block I, compartment 9 (*b*) ii.	Do. ..	..	Do.	3·5
	Brooklands, compartment 5.	Do. ..	..	Artificial regeneration by planting *Eucalyptus pillularis.*	5·8
	Aramby, Block VII, compartment 3 (*c*).	Do ..	..	Artificial regeneration by planting *Eucalyptus globulus.*	3·70
	Cairnhill, Block I, compartment 4 (*a*) i.	Do. ..	..	Do.	3·40
	Coonoor Peak, Block II, compartment 2 (*c*).	Do. ..	..	Do	3·16

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	ACS.		RS.	RS.	RS.	RS.	RS.			
..	10	..	..	..	178	32	210	..	..	
..	3·4	..	..	..	45	2	47	..	..	
..	3·7	..	..	..	42	6	48	..	..	
..	3	..	..	..	46	4	50	..	..	
..	5·3	..	28	28	195	329	524	..	..	
..	3·2	..	..	..	38	..	38	..	..	
..	12	..	4	4	167	46	213	..	..	
..	7·6	..	1	1	170	44	214	..	..	
..	3	..	..	..	33	1	34	..	..	
..	3·5	..	..	..	41	1	42	..	..	
..	5·8	..	31	33	304	109	413	..	..	
..	3·70	..	..	..	62	..	62	..	..	
..	3·40	..	..	..	40	..	40	..	..	
..	3·16	..	26	26	33	26		..	..	

Progress in afforestation and regeneration under Working

Division	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.*		YRS.	ACS.		ACS.
The Nilgiris—*cont.*	Brooklands, compartment 6.	1932-33 ..	..	Artificial regeneration by planting *Eucalyptus pillularis.*	5
	Bleakhouse, compartment 2.	Do. ..	..	Do.	6·37
	Aramby Block VII, compartment 4 (*a*).	Do. ..	2·36	Artificial regeneration by planting *Eucalyptus globulus.*	..
	Cairnhill, Block I, compartment 4 (*a*) 1.	Do. ..	5·10	Do.	..
	Governorshola, Block IV, compartment 3.	Do. ..	6·20	Do.	..
	Brooklands. Block I, compartment 7.	Do. ..	3·40	Do.	..
	Coonoor Peak, compartment 21.	Do. ..	1	Do.	..
	Coonoor Peak, compartment 38.	Do. ..	2	Do.	..
	Bleakhouse. compartment 3.	Do. ..	6·20	Artificial regeneration by planting *Eucalyptus pillularis.*	..
	Rallia, compartpartments 13 and 14.	Do. ..	15·98	Artificial regeneration by planting *Eucalyptus globulus.*	..
		Total ..	446·24	..	3,421·03
Palghat	Pole working circle, Block I, compartment III.	1926-27	181·27	Stump planting of one year old stumps.	181·27
	Pole working circle, Block II, coupe I, compartment 8 (Part).	1927-28	112	Do. ..	112

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS	RS.	RS.	RS.	RS.	RS.	RS.	
..	5	..	22	22	57	22	79	..	..	
..	6·37	..	1	1	90	1	91	..	..	
2·36	2·36	47	..	47	47	..	47	..	..	
3·10	3 10	36	..	36	36	..	36	..	..	
6·20	6·20	92	..	92	92	..	92	..	..	
3·40	3·40	40	..	40	40	..	40	..	..	
1	1	11	..	11	11	..	11	..	..	
2	2	10	..	10	10	..	10	..	..	
6·20	6·20	128	..	123	123	..	123	..	..	
15·98	15·98	235	..	235	235	..	235	..	..	
96·21	4,121·27	2,666	557	3,223	10,899	2,035	12,934	118	3.567	
..	181·27	..	11 (a) 758	769	2,505	2,505	4,510	1,145	1,145	
..	112	..	31	31	1,473	551	2,024	..	..	

(a) Spent for spreading introduced teak.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.*		YRS.	ACS.		ACS.
Palghat—*cont.*	Pole working circle, Block II, compartment 8, coupe II.	1928-29	125	Stump planting of one year old stumps.	125
	Pole working circle, Block II, compartment 8, coupe III	1929-30	79·20		79·20
	Pole working circle, Block II, compartment 8, coupe IV.	1930-31	91		19
	Pole working circle, Block II, compartment 8, coupe V.	1931-32	108·25		108·25
	Pole working circle, Block II, compartment 8, coupe VI.	1932-33	102		..
	Ponam working circle, compartment 17, coupe I.	1926-27	45	Ponam ..	45
	Ponam working circle, compartment 16, coupe II.	1927-28	44	Do. ..	44
	Ponam working circle, compartment 16, coupe III.	1928-29	25	Do. ..	25
	Ponam working circle, compartment 16, coupe IV.	1929-30	28	Do. ..	28

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS	ACS.	RS.	RS	RS.	RS.	RS.	RS.			
..	125	..	6 (*b*) 3	8	1,064	316	1,380	..	..	
..	79·20	..	32	32	983 (*c*) 29	355	1,338 29	..	..	
..	91	..	67	67	1,092	336	1,428	..	..	
..	108·25	..	280	280	1,844 55	280	2,124 55	..	..	
102	102	506 (*d*) 155	..	661	1 326	..	1,326	..	..	
		(*e*) 503	..	503	503	..	503			
		(*f*) 56	..	56	107	..	107			
		(*g*) 37	..	37	37	..	37			
					119	..	* 119			
					6	..	(*e*) 6			
..	45	..	..	..	26	207	233	..	..	
..	44	..	88	88	3	642	645	..	..	
..	25	..	5	5	112	477	589	..	..	
..	28	..	10	10	169	330	499	..	..	

* Cost of teak stump supplied to the District Forest Officer, Tinnevelly, and cost adjusted.
(*b*) Spent for testing soil in coupes I and II.
(*c*) Cost on teak plants raised for Madras Forest College.
(*d*) Spent for carrying out experiments in Varali coupe VI as per Conservator's orders.
(*e*) Cost of clearing, burning and cutting back bamboo regrowth in Pole coupe VII to be regenerated in 1933-34.
(*f*) Cost of nursery for planting in Pole coupe VII.
(*g*) Cost of nursery for plantation in Ponam coupe VIII.

Progress in afforestation and regeneration under Working

Division.	Working circle and block.	Period	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.*		YRS.	ACS.		ACS.
Palghat—*cont.* ..	Ponam working circle, compartment 16, coupe V.	1930-31	28	Ponam ..	28
	Ponam working circle, compartment 16, coupe VI.	1931-32	23	Do. ..	23
	Ponam working circle, compartment 16, coupe VII.	1932-33	23	Do. ..	..
	Mullangadu, compartment 27.	1927-28	120	Clearing the area.	120
	Singapathi, coupe II.	1928-29	33	Do.	33
	Mullangadu, coupe II.	Do	31	Do.	31
	Kallar, coupe I ..		18	Do.	18
	Kallar, coupe II ..	1928-29 & 1929-30	31	Do.	31
	Singapathi, coupe III.	1929-30	13	Do.	13
	Kallar, coupe III..	1930-31	28	Do.	28
	Singapathi, coupe VI.	Do.	33	Do.	33
	Mullangadu, coupe IV.	Do.	33	Do.	33
	Singapathi, coupe V.	1930-31 & 1931-32	35	Do.	35
	Mullangadu, coupe V.	Do.	31	Do.	31
	Kallar, coupe IV..	Do.	33	Do.	33
	Sholakarai, coupe .. IV.	1930-31	58	Do.	58
	Singapathi, coupe VI.	1931-32 & 1932-33	23	Do.	12
	M llangadu, coupe VI.	Do.	26	Do	13
	Kallar, coupe V. ..	Do.	34	Do.	17
	Singapathi coupe VII.	1932-33	16	Do.	..
	Mullangadu, coupe VII.	Do.	22	Do.	..

Plans or Schemes during the year 1932–33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS	ACS.	RS	RS.	RS.	RS.	RS.	RS.			
..	28	..	58	58	172	458	630	..	..	
..	23	..	73	73	78	73	151	..	..	
		(*h*) 36	..	36						
23	23	..	..	..	85	..	85	..	..	
		(*i*) 69	..	69	69		69			
..	120	..	..	..	..	180	180	..	..	
..	33	..	..	..	..	99	99	..	..	
..	31	..	..	..	..	35	35	..	..	
..	18	..	..	..	..	50	50	..	..	
..	31	..	..	..	..	141	141	..	..	
..	13	..	..	..	..	36	36	..	..	
..	28	..	..	..	..	56	56	..	..	
..	33	..	..	..	..	66	66	..	..	
..	33	..	..	..	..	50	50	..	..	
..	35	..	..	..	..	50	50	..	..	
..	31	..	..	..	..	42	42	..	..	
..	33	..	..	..	..	59	59	..	..	
..	58	..	..	..	..	14	14	..	..	
11	23	..	11	11	..	23	23	..	..	
13	26	..	6	6	..	19	19	..	..	
17	34	..	8	8	..	17	17	..	..	
8	8	..	5	5	..	5	5	..	..	
11	11	..	6	6	..	6	6	..	..	

(*h*) Teak nursery foreplanting coupe VII and replacing casualties in coupe VI.
(*i*) cost of nursery, etc., for planting in Ponam coupe VIII.

Progress in afforestation and regeneration under Working

Division	Working circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.*		YRS.	ACS.		ACS.
Palghat—*cont*	Kallar coupe VI ..	..	35	Clearing the area.	..
	Mangarai coupe I.	1931-32	108	Do.	108
	Anaikatty, coupe I.	..	83	Do.	83
	Ichikuli coupe I. ..	..	41	Do.	41
	Mangarai coupe II.	1932-33	104	Do.	..
	Anaikatty coupe II.	Do.	83	Do.	..
	Propagation of sandal in Thadagam.	1931-32 & 1932-33	..	..	..
	Sowing of tamarind and neem seeds in Thadagam.	Do.	..	..	..
	Experimental planting in a selected locality in Singapatty, coupes VII and VIII.	1932-33	..	..	..
	Total ..	..	2,085	..	1,660
	Grand Total ..	..	39,448	..	22,950
	Grand Total, Presidency.	..	45,487	..	28,944

Plans or Schemes during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
18	17	..	9	9	..	9	9	..	..	
..	108	..	..	..	..	39	39	..	..	
..	83	..	..	..	..	41	41	..	..	
..	41	..	..	..	..	21	21	..	..	
104	104	..	45	45	..	45	45	..	..	
83	83	..	41	41	..	41	41	..	..	
..	..	..	11	11	..	38	38	..	..	
..	..	..	30	30	..	33	33	..	..	
..	..	1	..	1	1	..	1	..	..	
389	2,049	1,362	1,592	2,954	11,854	7,243	19,097	1,145	1,145	
1,999	24,949	20,006	10,233	30,239	22,848	1,51,235	3,74,083	6,379	49,853	
2,777	31,721	29,093	19,329	48,422	1,51,005	3,49,298	5,00,303	20,178	2,03,807	

* NOTE.—The nursery costs have been apportioned—Vide Form 34 B.

ANNUAL FORM

Forest Department,

Plantations not under Working Plans

Division.	Working Circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
WALTAIR CIRCLE.		YRS.	ACS.		ACS.
Regular plantations.					
Guntur	Muthayapalem reserved forest 1924–25.	..	..	Casuarina planting.	5
Taungya operations.					
Godavari, Upper ..	Peddamidisileru reserved forest. Tuniki cheruvu reserved forest. Bhadrachellam reserved forest. Repaka reserved forest. Rekapalli hill reserved forest. Kansalur reserved forest.	..	..	Taungya operations. (*a*)	103
Guntur	Bollapalli extension VII.	..	..	Do.	30
Cultural Operations.					
Vizagapatam ..	Tangedu experimental plot in Arlova reserved forest.	1928–29 to 1933–34.	30 (*j*)	Clear felling and sowing.	17
	Chinagora Teak working circle, (experimental).	(*b*)	(*b*)	Clear felling and sowing teak.	..
	Reserves of Palakonda and Narasapatam ranges.	1930–31 to 1941–42.	(*d*)	Direct sowing of sandal seed. (*e*)	20·15
	Teak conversion working circle, Wangasari reserved forest (experimental).	(*b*)	(*b*)	Clear felling and raising teak with dibbling and stump planting.	16

Note for the Waltair Circle—

(*a*) The difference between the closing balance of 1931–32 and opening balance of 1932–33 is due to the transfer of some areas from tanugya operations to cultural operations The figures now given are correct.

(*b*) As the idea is to try and find out if we shall succeed with teak neither period nor area has yet been fixed.

(*j*) Sal experimental plots in Mokkava and Polla (Vizagapatam district) 1928–29, 3·5 acres abandoned.

No. 34-B.

Madras.

during the year 1932–33.

Area regenerated during the year.	Total area to be regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
..	5	..	..	..	202	..	202	..	9	
..	103	..	29	29	426	764	1,190	..	3,974	
10	40	..	5	5	..	5	5	165	165	
5	22	67	18	85	205	41	246	..	..	
2·25 (c)	2·25	36	9	45	70	10	80	..	..	
8·25	28·40	9	..	9	37	..	37	..	..	
5	21	85	158	243	452	401	353	..	..	

(c) Five acres were also clear felled and burnt in March 1933 for sowing in 1933-34.
(d) One fourth acre per beat in Palakonda and half acre per beat in Narasapatam to be sown with sandal seed per year.
(e) Correct area.

Plantations not under Working Plans

Division.	Working Circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
WALTAIR CIRCLE—*cont.*					ACS.
Cultural operations—cont.					
Parlakimidi ..	Narayanapur reserved forest. Lavanyakota reserved forest. Ambaldoddi reserved forest. Biduva reserved forest. Chandragiri reserved forest. Ruliba reserved forest. Range office compound at Guttahalli.	..	..	(*f*) Sowing of teak seeds.	110
	All reserved forests in the division.	..	..	Sowing of sandal seed in suitable patches for propagation centres in the different reserves.	103
Godavari, Upper ..	Peddamidisileru reserved forest. Tuniki cheruvu reserved forest. Dummagudem reserved forest. Ramachandram reserved forest. Seetharampuram reserved forest. Rekapalli reserved forest. Walsagri reserved forest. Lakkavaram reserved forest.	..	..	Regeneration with teak, partly natural and partly artificial (stump planting.)	(*a*) 2,406

(*f*) Teak sowings were carried out at random in the past in the several reserves. These are more in the nature of trials.

during the year 1932-33—*cont.*

Area regenerated during the year.	Total area to be regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
..	110	..	7	7	297	1,336	1,633	..	..	
16	119	67	38	105	312	220	532	..	..	
38	2,489	1,790	1,679	3,469	53,844	7,640	61,484	33,162	3,68,799	

Plantations not under Working Plans

Division.	Working Circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
WALTAIR CIRCLE—*cont.*					ACS.
Cultural operations—cont.		YRS.			
Godavari, Upper—*cont.*	Nugur reserved forest. Peddamidisileru reserved forest. Dummagudem reserved forest. Aralagudem reserved forest. Gogubakka reserved forest. Pegha reserved forest. Rekkapalli hill reserved forest. Kansalur reserved forest.	..	(*g*)	Dibbling sandal seeds.	26
Godavari, Lower ..	Rajavomangi reserved forest. (Ammayagoppu valley). Tirumalayapalem reserved forest. Mallavaram reserved forest. Sudikonda reserved forest. Kunkudumanulanka	..	..	Artificial regeneration with teak.	
	Bedadavole and Koppalli-Kavvada teak feries.	..	..	Natural regeneration from teak, etc., coppice shoots.	89
Guntur	Muthayapalem reserved forest.	1912-13	(*h*)	Cultural operations.	5
	Guthikonda reserved forest.	1924-25			6
	Venkatayapalem reserved forest.	1926-27			3
	Nachugunta reserved forest.	1927-28			0·2
Nellore	Sreeharikota reserved forest.	..	(*i*)	Sowing of seeds of different species in fuel coupes.	3·9
	Kambakam hill reserved forest.			Sowing sandal seeds	17·5
	Udayagiri Durgam reserved forest.			Do.	0·5
					2,961·25

(*g*) Sandal seeds were dibbled in small suitable patches scattered over in all ranges.
(*h*) Only trial sowings were made once and so column (4) is blank.
(*i*) Some scattered sowings were made in felled coupes to try and find out the best method of improving stocking.

during the year 1932-33.—*cont.*

Area regenerated during the year.	Total area to be regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS	RS.	RS.	RS.	RS.	RS.	RS.	
2	28	3	..	3	19	124	143	..	..	
127	216	745	46	791	2,590	623	3,213	..	..	
..	5	..	..	..	22	..	22	..	..	
..	6	..	..	..	..	..	..	..	..	
..	3	..	..	..	38	..	38	..	..	
..	0·2	..	..	..	11	..	11	..	..	
7	10·9	35	..	35	110	..	110	..	..	
5	22·5	10	..	10	131	..	131	..	..	
0·25	0·75	6	..	6	31	..	31	..	..	
270·75	3,232·00	2,853	1,989	4,842	58,797	11,164	69,961	33,327	3,72,947	

Plantations not under Working Plans

Division	Working Circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
			ACS.		ACS.
BELLARY CIRCLE—*Nil.*					
SALEM CIRCLE.					
Vellore, East ..	Ambur tope ..	1913	..	Planting ..	6
	Amerdi plantation	1922-23	..	Clear-felling and artificial stocking with timber species.	92·25
				Total ..	98·25
Salem, Central ..	Kurumbapatti plantation.	1920-21	..	Sowing teak ..	1·75
	Chitteris	1929-30	..	Lac cultivation.	..
	Shevaroys Central working circle	4 years ..	321	Planting silver-oak and cyprus and sowing of seeds of Australian wattle.	143·00
	Sanniyasimalai working circle.	4 acres in 1 year.	..	Planting Acacia decurrens and blue gum seeds.	4·00
	Ayyanthirumaligai.	1923-24	..	Sowing several species.	..
				Total ..	148·75
Salem, South ..	Tope attached to District Forest Officer's quarters.	1904	..	..	9·5
				Grand Total ..	256·50

during the year 1932-33—*cont.*

Area regenerated during the year.	Total area to be regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	ACS.		RS.	RS.	RS.	RS.	RS.		RS.	
..	6	..	..	..	....	45	45	....	1,736	
..	92·25	..	5	5	3,102	2,230	5,332	..	10,846	
..	98·25	....	5	5	3,102	2,275	5,377	..	12,582	
..	1·75	..	..	..	202	40	242	..	..	
..	..	..	..	..	200	..	200	..	..	
..	143·00	..	..	..	..	9,096	9,096	..	..	
..	4·00	..	..	..	108	..	108	..	..	
..	..	..	..	..	131	69	200	..	..	
..	148·75	..	..	..	641	9,205	9,846	..	..	
..	9·5	..	..	..	467	1,760	2,227	..	280	
..	256·50	..	5	5	4,210	13,240	17,450	..	12,862	

Plantations not under Working Plans

Division	Working Circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area in which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
COIMBATORE CIRCLE.					ACS.
Madura	Gundan shola blue gum plantation.	1906 ..	..	Planting acacia decurrens	245
	Pambar pine plantation.				842
	Gundal valley ..				148
	Velancombai teak plantation.	..	..	..	15
	Vannathiparai teak plantation.	1870 ..	..	..	4
	Sethuvaikal new teak plantation.	1920-21 ..	..	..	53
..	Alagar Hills ..	..	..	Planting Mahagony.	3
Tinnevelly	Kudiramoliteri Reserved Forest.	..	..	Dibbling palmyra nuts and Dodonea Viscosa seeds.	6,144
	Kariar teak plantation.	1922-24 ..	..	..	85
	Kariar teak Richmond plantation.	1906 ..	..	..	1
	Kodamady teak plantation.	1917 ..	..	..	111
	Kariar Kani area ..	1912 ..	..	..	23
	Haynes plantation.	..	..	..	23
	Mundanthurai plantation.	1928 ..	..	Dibbling teak.	10
	Kariar teak plantation.	1932 ..	..	Stamp planting teak	..
	Servaiyar teak plantation.	1932 ..	..	Do.	..
Coimbatore, North.	Minchiguly plantation.	1918 ..	..	Dibbling teak, vengai reserved, etc.	5
	Irrigation plantation.	..	..	Plantation by irrigation.	.
				Total ..	7,712

* Column (11) excludes Rs. 281-2-0 spent on gap regeneration, etc.

during the year 1932-33—*contd.*

Area regenerated during the year.	Total area to be regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
..	245	..	..	..	18,985	..	18,985	..	5,655	
..	842	..	..	..	33,486	5,999	39,485	174	1,826	
..	148	..	..	..	3,106	131	3,237	..	..	
..	15	..	..	..	1,124	142	1,266	..	2,315	
..	4	..	..	..	1,405	..	1,405	..	2,125	
..	53	..	..	..	3,770	759	4,529	..	..	
..	3	..	..	..	64	..	64	..	..	
500	6,644	877	..	877	13,677	1,899	15,576	1,523	57,048	
..	85	..	94	94	1,642	851	2,493	..	107	
..	1	..	..	..	5	..	5	..	94	
..	111	..	83	83	4,236	1,320	5,556	..	218	*
..	23	..	..	..	47	310	357	..	178	
..	23	..	..	..	26	37	63	..	..	
..	10	..	..	..	182	35	217	..	..	
11	11	309	..	309	309	..	309	..	..	
10	10	233	..	233	233	..	233	..	..	
..	5	..	..	..	123	618	741	..	..	
3	3	73	2	75	73	2	75	..	..	
524	8,236	1,492	179	1,671	82,493	12,103	94,596	1,697	69,066	

Plantations not under Working Plans

Division	Working Circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE.			ACS.		ACS
North Mangalore Division.					
Mangalore Range.	Kodialmale ..	1921-22 ..	52	Sowing of Hopea in prepared patches.	52
	Someshwar, coupe IV.	1929-30 ..	2	Funnel sowing of Xylia teak and Biti.	2
	Someshwar, coupe V.	1929-30 and 1930-31.	4	Do.	4
Udipi Range ..	Someshwar, coupe III.	1930-31 ..	65	Sowing of Hopea.	65
	Do.	1931-32 ..	91	Do.	91
	Someshwar, coupe, VI (*a*).	Do. ..	4	Funnel sowing of teak, etc	4
	Someshwar, coupe VI (*b*).	Do. ..	2	Do.	2
	Someshwar Reserved Forest.	1930-31 ..	1	Sowing of teak.	1
Coondapoor Range.	Madibare Reserved Forest.	1927-28 ..	11	Sowing of Xylia.	11
		Total ..	232	....	232
South Mangalore Division.					
Uppinangadi Range.	Narankimale Reserved Forest felled coupes.	1930-31 ..	89	Sowing of deciduous species.	89
	Kidu Reserved Forest.	1922 ..	19	Natural regeneration.	19
	Narankimale Reserved Forest, coupe XVIII.	1930-31 ..	6	Artificial regeneration of Hopea and teak.	6
Kasaragod Range..	Kinnanore Reserved Forest.	1932-33 ..	2	Old teak ..	..
		Total ..	116	..	114

during the year 1932–33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.			
..	52	..	..	..	146	14	160	..	..	
..	2	..	16	16	155	63	218	..	..	
..	4	..	9	9	182	13	195	..	..	
..	65	..	58	58	416	181	597	..	..	
..	91	..	153	153	586	153	739	..	..	
..	4	..	27	27	64	27	91	..	..	
..	2	27	..	27	69	..	69	..	..	
..	1	..	12	12	..	12	12	..	..	
..	11	..	..	..	121	25	146	..	..	
..	232	27	275	302	1,739	488	2,227	..	..	
..	89	..	14	14	357	573	930	..	..	
..	19	..	..	..	..	170	170	..	..	
..	6	..	3	3	82	23	105	..	..	
2	2	..	7	7	..	7	7	..	..	
2	116	..	24	24	439	773	1,212	..	..	

Plantations not under Working Plans

Division.	Working Circle and book.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.* *The Nilgiris Division.*			ACS.		ACS.
Ootacamund Range.	Fife's covert ..	1932-33 ..	0·5	Planting Hakia.	..
	Jackosmullah ..	Do. ..	1·5	Do.	..
	Kundah catchment area.	Do. ..	Only scattered plots and belts.	Planting Hakia cypres and Frenella.	..
	Avalanche Bangi tappal road.	Do. ..	Do.	Do.	..
Palghat Division.					
..	Puliyampulli tope, reserve.	1919-20 ..	20.	Tanangya plantations.	20
	Korma teak plantation.	.. ..	5	Do.	5
	Vellapathy ..	1919-20 ..	39.	Cultural operations.	39
	Muthikulam bungalow compound.	1921-22 ..	4	Do.	4
	Dhone Reserve ..	1919-20 ..	10.	Do.	10
	Elival teak plantation (old).	Do. ..	10	Do.	10
	Chenat Nair old plantation.	1920-21 ..	263	Do.	263
	Dhone 4-acre plot ..	1928-29 ..	4	Do.	4
	Dhone coupe I ..	1929-30 ..	26	Do.	26
	Do. II ..	1930-31 ..	23.	Do.	23
	Do. III ..	1931-32 ..	20	Do.	20
	Do. IV ..	1932-33 ..	23	Do.	..
	....	..	..	..	..
	....	..	..	..	..
	....	..	..	..	..

(*a*) Spent for sowing Tirva seeds as per Conservator's orders
(*c*) Cost of teak nursery for planting Dhone, coupe V.
(*d*) Cost of teak nursery for planting Dhone, coupe VI.
(*e*) Cutting bandurning Dhone, coupe V.

during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.			
0·5 (incomplete).	..	20	87	107	20	87	107	..	..	
1·5 (incomplete).	..	20	..	20	20	..	20	..	..	
..	..	40	..	40	40	..	40	..	..	
2	..	23	..	23	23	..	23	..	..	
..	..	103	87	190	103	87	190	..	..	
..	20	..	..	..	..	329	329	..	..	
..	5	..	..	..	..	Not known.		..	..	
..	39	..	..	..	573	59	632	..	..	
..	4	..	..	..	110	..	110	..	..	
..	10	..	..	..	221	129	350	..	..	
..	10	..	(a) 3	3	..	147	147	..	..	
..	263	..	103 17	120	2,865	5,388	8,253	..	..	
..	4	..	2	2	50	20	70	..	..	
..	26	..	27	27	625	273	898	..	..	
..	23	..	24	24	944	108	1,052	..	..	
..	20	..	72	72	722	72	794	..	..	
23	23	306	..	306	545	..	545	..	..	
..	..	(c) 40	..	40	90	..	90	..	..	
..	..	(d) 41	..	41	41	..	41	..	..	
..	..	(e) 56	..	56	56	..	56	..	..	

Plantations not under Working Plans

Division.	Working Circle and block.	Period.	Area to be regenerated during the period.	Method of treatment.	Area on which regeneration was completed at the end of the previous year.
(1)	(2)	(3)	(4)	(5)	(6)
OOTACAMUND CIRCLE—*cont.*			ACS.		ACS.
Palghat Division—cont.					
	Elival coupe I ..	1928-29 ..	21	Cultural operations.	21
	Do II ..	1929-30 ..	33	Do.	33
	Do. III ..	1930-31 ..	35	Do.	35
	Do. IV ..	1931-32 ..	55	Do.	55
	Do. V ..	1932-33 ..	14	Do.	..
	.. ..	..	..	..	..
	....	..	..	..	..
	....	..	..	..	..
	Sappal coupe I ..	1928-29 ..	5	..	5
	Do. II ..	1929-30 ..	13	..	13
	Kalladikot valley ..	1931-32 and	..	..	..
	....	1932-33	..	..	..
	....	..	..	..	..
	....	..	..	..	..
	Silent valley, coupe I.	1928-29 and 1929-30	..	..	..
	Silent valley, coupe II	1930-31 ..	..	..	..
	Silent valley, coupe III.	1931-32 ..	..	..	..
	Silent valley, coupe IV.	1932-33 ..	..	..	..
	....	..	..	..	..
	....	..	..	..	..
	.. ..	..	..	..	..
	....	..	..	..	..
	....	..	..	..	..
	Dhone evergreen nursery.	1928-29 ..	..	..	..
	Nursery for Andaman Padauk.	Do. ..	..	..	..
	Evergreen nursery in Silent valley.	Do. ..	..	..	..
	Supply of seeds ..	..	..	..	..
	Total ..	..	621	..	585
	Grand total ..	..	971	..	931
	Total, Presidency ..	..	..	..	11,860

(*f*) Cost of teak nursery for stump planting in 1933-34.
(*g*) Cost of teak nursery for stump planting in 1934-35.
(*h*) Cutting and burning in Elival, coupe VI.
(*i*) Spent for gluta nursery for regeneration in 1933-34.
(*j*) Spent for Hopea and Aini nursery for regeneration in 1933-34.
(*k*) Collection of seeds for 1934-35 regeneration.

during the year 1932-33—*cont.*

Area regenerated during the year.	Total area regenerated to the end of the year.	Expenditure during the year.			Expenditure to the end of the year.			Revenue during the year.	Total revenue to the end of the year.	Remarks.
		Creation.	Tending.	Total including tending and upkeep.	Creation.	Tending.	Total including tending and upkeep.			
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
..	21	..	21	21	343	148	491	..	..	
..	33	..	34	34	677	178	855	..	..	
..	35	..	63	63	1,537	187	1,724	..	..	
..	55	..	277	277	1,659	277	1,936	..	..	
14	14	200	..	200	336	..	336	..	..	
..	..	(*f*) 57	..	57	67	..	67	..	..	
..	..	(*g*) 12	..	12	12	..	12	..	..	
..	..	(*h*) 49	..	49	49	..	49	..	..	
..	5	..	..	..	103	14	117	..	..	
..	13	..	..	..	386	58	444	..	..	
..	..	250	29	279	411	29	440	..	..	
..	..	(*i*) 5	..	5	5	..	5	..	..	
..	..	(*j*) 30	..	30	30	..	30	..	..	
..	..	(*k*) 5	..	5	5	..	5	..	..	
..	..	(*l*) 13	..	13	13	..	13	..	..	
..	..	..	8	8	376	56	432	..	..	
..	..	..	22	22	269	67	336	..	..	
..	..	..	50	50	385	50	435	..	..	
..	..	238	..	238	252	..	252	..	..	
..	..	(*m*) 1	..	1	1	..	1	..	..	
..	..	(*n*) 8	..	8	8	..	8	..	..	
..	..	(*o*) 34	..	34	34	..	34	..	..	
..	..	(*p*) 37	..	37	37	..	37	..	..	
..	..	(*q*) 22	..	22	22	..	22	..	..	
..	..	..	..	..	30	..	30	..	..	
..	..	..	..	..	18	..	18	..	..	
..	..	..	..	..	82	..	82	..	..	
..	..	..	..	..	20	..	20	..	..	
37	622	1,403	752	2,154	14,007	7,590	21,597	..	..	
41	972	1,533	1,138	2,671	16,288	8,938	25,226	..	..	
836	12,696	5,878	3,311	9,189	1,61,788	45,445	2,07,233	85,024	4,54,875	

(*f*) Cost of tin plates for 1933-34 regeneration.
(*m*) Gluta nursery for 1933-34 regeneration.
(*n*) Aini nursery for 1933-34 regeneration.
(*o*) Aini nursery for Silent valley, coupes V and VI.
(*p*) Teak nursery in Panakadam for planting in 1934-35.
(*q*) Teak nursery for planting in Chindaki.

ANNUAL FORM No. 35.

Forest Department, Madras Presidency.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1932-33 and Agency of Exploitation.

Division	Timber in the rough logs.					Timber in the rough poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
WALTAIR CIRCLE.															
Reserved Forests.															
Ganjam	1	42	17	14	74	13	105	2	..	120	..	..	..	..	..
Vizagapatam	4	..	..	..	4	..	17	..	..	17	..	..	..	..	..
Godavari, Upper	33	15	..	..	48	27	5	..	..	32	..	..	..	..	..
Do. Lower	1	60	..	..	61	..	..	..	..	..	..	..	..	..	..
Guntur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	39	117	17	14	187	40	127	2	..	169	..	..	..	..	..
Reserved Lands															
Parlakimedi Maliahs	3	12	4	8	27	..	30	..	7	37	..	..	..	..	..
Unreserved Lands.															
Ganjam	..	39	7	..	46	1	15	..	..	16	..	..	..	..	..
Vizagapatam	7	4	..	..	11	..	8	1	..	9	..	..	..	..	..
Godavari, Upper	5	1	..	..	6	2	9	..	..	11	..	..	..	..	..
Do. Lower	..	123	21	..	144	..	1	..	..	1	..	5	..	..	5
Guntur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	12	167	28	..	207	3	33	1	..	37	..	5	..	..	5
Grand Total	54	296	49	22	421	43	190	3	7	243	..	5	..	..	5

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1932-33 and Agency of Exploitation—cont.

Division.	Miscellaneous.					Total timber.					Fuel.					Total outturn.
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
WALTAIR CIRCLE—*cont.*																
Reserved Forests—cont.																
Ganjam	..	..	..	..	..	14	147	19	14	194	10	626	1	..	637	831
Vizagapatam	2	..	..	..	2	6	17	..	..	23	5	248	..	..	253	276
Godavari, Upper	1	..	..	..	1	61	20	..	..	81	3	..	..	..	3	84
Do. Lower	..	..	..	..	..	1	60	..	..	61	44	730	156	..	930	991
Guntur	..	6	2	..	8	..	6	2	..	8	10	730	..	..	740	748
Nellore	..	1	..	..	1	..	1	..	..	1	12	376	..	..	388	389
Total	3	7	2	..	12	82	251	21	14	368	84	2,710	157	..	2,951	3,319
Reserved Lands—cont.																
Parlakimedi Maliahs	..	..	..	..	..	3	42	4	15	64	19	89	..	..	108	172
Unreserved Lands—cont.																
Ganjam	..	..	..	..	..	1	54	7	..	62	....	112	..	..	112	174
Vizagapatam	..	..	..	..	..	7	12	1	..	20	....	28	..	..	28	48
Godavari, Upper	1	..	..	..	1	8	10	..	..	18	1	14	..	..	15	33
Do Lower	..	..	..	..	..	..	129	21	..	150	..	24	..	..	24	174
Guntur	..	14	11	..	25	..	14	11	..	25	..	104	..	..	104	129
Nellore	..	17	7	..	24	..	17	7	..	24	..	36	..	..	36	60
Total	1	31	18	..	50	16	236	47	..	299	1	318	..	..	319	618
Grand Total	4	38	20	..	62	101	529	72	29	731	104	3,117	157	..	3,378	4,109

NOTE FOR WALTAIR CIRCLE.—The figures against all divisions under reserved forests and for Upper Godavari under unreserved lands are actuals.

UNRESERVED LANDS—GANJAM.—The figures under 'Purchasers' are estimates obtained by converting revenue at seigniorage rates. The other figures are actuals.

VIZAGAPATAM.—The figures under 'Purchasers' are estimates furnished by Tahsildars. Others are actuals.

LOWER GODAVARI.—The figures under 'Purchasers' are estimates obtained by converting revenue at As. 1-6 per cubic foot. The other figures are actuals.

GUNTUR.—Except under 'Free grantees' the figures are estimates obtained by converting revenue at 1 anna per cubic foot.

NELLORE.—Except under 'Free grantees' the figures are estimates obtained by converting revenue at 3 pies per cubic foot.

SQUARED TIMBER.—Nil.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1932-33 and Agency of Exploitation—*cont.*

Division.	Timber in the rough logs.					Timber in the rough poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
BELLARY CIRCLE.															
I. Reserved Forests.															
Anantapur	..	6	7	..	13	..	..	..	..	..	..	..	..	..	..
Kurnool, East ..	6	1	..	..	7	..	..	..	..	..	..	..	..	..	..
Do. South ..	34	42	..	..	76	4	112	1	1	118	..	..	..	..	..
Do. West ..	3	25	..	..	28	2	20	2	..	24	..	..	..	..	..
Cuddapah, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	43	74	7	..	124	6	132	3	1	142	..	..	..	..	..
II. Leased Forests—Nil.															
III. Reserved Lands —Nil.															
IV. Unreserved Lands.															
Anantapur	..	63	4	..	67	..	..	..	..	..	..	..	..	..	..
Kurnool, East ..	..	2	10	..	12	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	9	..	9	..	12	..	..	12	..	..	..	..	..
Do. West ..	..	23	..	..	23	..	..	..	..	..	..	..	..	..	..
Cuddapah, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	88	23	..	111	..	12	..	..	12	..	..	..	..	..
Grand Total ..	43	162	30	..	235	6	144	3	1	154	..	..	..	..	..

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1932–33 and Agency of Exploitation—cont.

Division.	Miscellaneous.					Total timber.					Fuel.					Total outturn.
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
BELLARY CIRCLE—*cont.*																
I. Reserved Forests —cont.																
Anantapur	..	..	..	..	..	..	6	7	..	13	3	22	..	..	25	38 *
Kurnool, East ..	1	..	..	..	1	7	1	..	..	8	11	14	..	..	25	33 *
Do. South ..	..	6	..	..	6	38	160	1	1	200	5	265	..	1	271	471 *
Do. West ..	3	42	..	..	45	8	87	2	..	97	83	1,224	1	..	1,308	1,405 *
Cuddapah, North ..	2	34	7	..	43	2	34	7	..	43	30	1,601	..	..	1,631	1,674 *
Do. South ..	2	24	1	..	27	2	24	1	..	27	53	3,629	..	..	3,682	3,709 *
Total ..	8	106	8	..	122	57	312	18	1	388	185	6,755	1	1	6,942	7,330
II. Leased Forests—Nil.																
III. Reserved Lands—Nil.																
IV. Unreserved Lands —cont.																
Anantapur	..	..	..	..	..	..	63	4	..	67	..	53	..	..	53	120 †
Kurnool, East ..	..	..	..	..	..	..	2	10	..	12	..	2	..	..	2	14 †
Do. South ..	..	..	..	..	..	..	12	9	..	21	..	7	..	..	7	28 †
Do. West ..	..	..	..	..	..	..	23	..	..	23	..	23	..	..	23	46 †
Cuddapah, North ..	..	3	..	..	3	..	3	..	..	3	..	19	..	..	19	22 †
Do. South ..	..	12	..	..	12	..	12	..	..	12	..	3	..	..	3	15 †
Total ..	..	15	..	..	15	..	116	23	..	138	..	107	..	..	107	245
Grand Total ..	8	121	8	..	137	57	427	41	1	526	185	6,862	1	1	7,049	7,575

* Actuals.

† Estimates based on revenue collected by Tahsildars. Timber at Rs. 2-8-0 per cart-load of 20 cubic feet and fuel at Re. 1-4-0 per cart-load of 20 cubic feet.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1932–33 and Agency of Exploitation—*cont.*

Division.	Timber in the rough logs.					Timber in the rough poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
SALEM CIRCLE.															
I. Reserved Forests.															
Chittoor	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vellore, East	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. West	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Salem, North	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..
Do. Central	..	3	..	..	3	..	..	..	..	..	..	..	..	..	..
Do. South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	4	..	..	4	..	..	..	..	..	..	..	..	..	..
II. Leased Forests —Nil.															
III. Reserved Lands —Nil.															
IV. Unreserved Lands.															
Chittoor	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vellore, East	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. West	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Salem, North	..	..	..	..	..	..	14	..	..	14	..	..	..	..	..
Do. Central	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	..	14	..	..	14	..	..	..	..	..
Grand Total	..	4	..	..	4	..	14	..	..	14	..	..	..	..	..

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1932–33 and Agency of Exploitation—cont.

Division.	Miscellaneous.					Total timber.					Fuel.					
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Total outturn.
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
SALEM CIRCLE—*cont.*																
I. Reserved Forests—cont.																
Chittoor	1	9	..	..	10	1	9	..	..	10	22	365	..	..	387	397
Vellore, East	(*a*) 3	3	..	..	6	3	3	..	..	6	20	435	..	..	455	461
Do. West	(*a*) 2	1	..	..	3	2	1	..	..	3	9	60	..	..	69	72
Salem, North	(*a*) 3	..	..	..	3	3	1	..	..	4	6	76	..	..	82	86
Do. Central ..	(*a*) 1	..	..	..	1	1	3	..	..	4	18	448	..	..	466	470
Do. South	..	1	..	..	1	..	1	..	..	1	13	90	..	..	103	104
Total ..	10	14	..	..	24	10	18	..	..	28	88	1,474	..	..	1,562	1,590
II. Leased Forest—Nil.																
III. Unreserved Lands—Nil.																
IV. Unreserved Lands—cont.																
Chittoor	19	3	..	22	..	19	3	..	22	..	52	..	..	52	74	
Vellore, East	84	19	..	103	..	84	19	..	103	..	155	..	..	155	258	
Do. West	4	1	..	5	..	4	1	..	5	..	5	..	..	5	10	
Salem, North	(*a*) 7	..	1	..	8	7	14	1	..	22	..	8	..	..	8	30
Do. Central ..	(*a*) 3	34	9	..	46	3	34	9	..	46	..	58	..	..	58	104
Do. South	..	30	3	..	33	..	30	3	..	33	..	55	..	..	55	88
Total ..	10	171	36	..	217	10	185	36	..	231	..	333	..	..	333	564
Grand Total ..	20	185	36	..	241	20	203	36	..	259	88	1,807	..	..	1,895	2,154

NOTE FOR SALEM CIRCLE—
Government Agency.—Based on actuals.
Reserves—Charcoal—One cubic foot = 6 cubic feet of fuel.
Timber and fuel—Purchasers—Chittoor and Central Salem.—Based on actuals.
East Vellore, West Vellore and North Salem.—Actuals based on contractor's accounts.
Timber.—(North Salem)—Calculated on money value at 2 annas a cubic foot.
South Salem—Timber.—Calculated on money value at 7¼ annas a cubic foot.
Fuel.—Based on actuals furnished by contractors.
Unreserved Lands—Particulars—Timber and fuel.—Based on the money value obtained at sales in all divisions.

Chittoor.—Timber at 3 annas per cubic foot and fuel at 1¼ annas per cubic foot.
East and West Vellore.—Timber at 2 annas a cubic foot.
Fuel at 1 anna a cubic foot.
North Salem.—Timber at 2 annas per cubic foot.
Fuel at 1 anna 9 pies per cubic foot.
Central and South Salem.—Timber at 4 annas a cubic foot and one anna per cubic foot.
Free grantees—Palmyra trees—
Chittoor.—Twenty cubic feet per tree.
East and West Vellore.—Ten cubic feet per tree.
Central and South Salem.—Seven cubic feet per tree.

(*a*) Represents sandalwood; sandalwood 2 qrs. = 1 cubic foot.
Note.—Timber and sandalwood less than 500 cubic feet is ignored.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1932-33 and Agency of Exploitation—*cont.*

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
COIMBATORE CIRCLE.															
I. Reserved Forests.															
Kollegal	3	..	..	..	3	(a) 3	..	..	..	3	..	..	..	..	..
Coimbatore, North ..	5	10	(b)	..	15	(a) 3	..	..	..	3	..	..	..	..	..
Do. South ..	..	(c) 112	..	..	112	3	..	..	..	3	(d) 46	(e) 5	..	..	51
Madura	(b)	..	..	..	..	1	..	..	..	1	(b) ..	..	..	..	..
Tinnevelly	..	..	..	..	..	(f) 8	..	..	..	8	..	..	..	..	..
Total ..	8	122	..	..	130	18	..	..	..	18	46	5	..	..	51
II. Leased Forests.															
Coimbatore, South ..	1	1	..	..	2	..	..	..	..	..	(g) 2	..	..	..	2
III. Reserved Lands—Nil.															
IV. Unreserved Lands.															
Kollegal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Coimbatore, North ..	..	..	..	..	..	(a) 2	..	..	..	2	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Madura	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tinnevelly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	..	2	..	..	..	2	..	..	..	..	..
Grand Total ..	9	123	..	..	132	20	..	..	..	20	48	5	..	..	53

NOTE FOR COIMBATORE CIRCLE—

(*a*) Denotes sandalwood.

	c. ft.
(*b*) Omitted being less than	1,000
(*c*) Timber cut from Ulandi Range by Mr. E. J. Kuruvilla ..	112,267
(*d*) Represents sawn timber—	
11,466 Broad gauge sleepers	37,822
3,201 Metre gauge sleepers	5,202
105 Broad gauge sleeper rejections	346
298 Metre gauge-sleeper rejections	484
1,093 Red cedar scantlings	2,145
Red cedar planks and sample pieces	50
	46,049
Obtained from the gross yield	91,708

(*e*) *Sawn timber*.—5,420 c. ft. of scantlings cut and removed from Ulandi Range by Mr. E. J. Kuruvilla, the log equivalent being 10,840 c. ft.

(*f*) Includes 910 qrs. 25 lb. of rough sandalwood extracted during the year departmentally.

(*g*) Represents squared timber of 1,640 c. ft. the log equivalent being 2,087 c. ft.

Factor of conversion.

Sandalwood, 2 quarters = 1 c. ft.

Unreserved lands.

North Coimbatore and Kollegal: Miscellaneous timber: 2 annas = 1 c. ft.
Kollegal: Fuel ½ anna = 1 c. ft.
North Coimbatore: fuel 1 anna = 1 c. ft.
South Coimbatore: Miscellaneous timber 4 annas = 1 c. ft.
Fuel 1 anna = 1 c. ft.
Tinnevelly and Madura: Timber and fuel 1 anna = 1 c. ft.
Tinnevelly: 1 palmyra tree = 10 c. ft.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1932-33 and Agency of Exploitation—*cont.*

Division.	Miscellaneous.					Total timber.					Fuel.					
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Total outturn.
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
COIMBATORE CIRCLE—*cont.*																
I. Reserved Forests—cont.																
Kollegal	..	1	..	..	1	6	1	..	..	7	..	51	..	..	51	58
Coimbatore, North	..	..	..	..	..	8	10	..	..	18	..	960	..	..	960	978
Do. South	..	10	..	..	10	49	127	..	..	176	1	303	..	..	304	480
Madura	..	7	..	..	7	1	7	..	..	8	8	512	..	..	520	528
Tinnevelly	..	31	..	..	31	8	31	..	..	39	..	2,552	..	..	2,552	2,591
Total ..	..	49	..	..	49	72	176	..	..	248	9	4,378	..	..	4,387	4,635
II. Leased Forests—cont.																
Coimbatore South	..	..	..	..	..	3	1	..	..	4	..	..	..	..	..	4
III. Reserved Lands—Nil.																
IV. Unreserved Lands—cont.																
Kollegal	..	7	..	..	7	..	7	..	..	7	..	6	..	..	6	13
Coimbatore, North	..	30	1	..	31	2	30	1	..	33	..	33	..	..	33	66
Do. South	..	5	1	..	6	..	5	1	..	6	..	28	..	..	28	34
Madura	..	68	3	..	71	..	68	3	..	71	..	82	..	..	82	153
Tinnevelly	..	..	5	..	5	..	..	5	..	5	..	112	..	..	112	117
Total ..	..	110	10	..	120	2	110	10	..	122	..	261	..	..	261	383
Grand Total ..	..	159	10	..	169	77	287	10	..	374	9	4,639	..	..	4,648	5,022

Outturn (*in thousands of cubic feet, solid*) of Timber and Fuel during the year 1932-33 and Agency of Exploitation—*cont.*

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
OOTACAMUND CIRCLE.															
I. Reserved Forests.															
Mangalore, North ..	(a) 4	..	..	..	4	..	..	..	..	..	..	..	..	..	..
Do. South ..	11	..	..	..	11	..	..	..	..	..	(b) 24	..	..	..	24
Wynaad	80	..	..	..	80	8	..	..	..	(c) 8	79	..	..	..	79
Nilambur	50	..	..	..	50	19	..	..	..	19	..	..	..	..	..
The Nilgiris	3	5	..	..	8	..	..	..	..	..	..	..	..	..	..
Palghat	146	76	..	..	222	..	..	..	..	..	..	..	..	..	..
Total ..	294	81	..	..	375	27	..	..	..	27	103	..	..	..	103
II. Leased Forests.															
Nilambur	81	3	..	..	84	10	..	..	..	10	..	..	..	..	..
III. Reserved Lands— Nil.															
IV. Unreserved Lands.															
Mangalore, North ..	59	..	..	..	59	4	..	..	..	4	..	..	..	..	..
Do. South ..	176	..	..	..	176	..	..	..	..	..	..	..	..	..	..
Wynaad	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nilambur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Note for Ootacamund Circle—

(*a*) Includes 62 c. ft. of sandalwood of North Mangalore division, 1,000 c. ft. of South Mangalore division, and 542½ c. ft. of the Nilgiris division (factor of conversion 2 qrs : 1 c. ft.)

(*b*) Represents the net outturn of sawn timber.

(*c*) Represents the net outturn of rough squared timber.

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1932-33 and Agency of Exploitation—*cont.*

Division.	Miscellaneous.					Total timber.					Fuel.					
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Total outturn.
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
OOTACAMUND CIRCLE—*cont.*																
I. Reserved Forests—cont.																
Mangalore, North ..	..	13	..	..	13	4	13	..	..	17	1	1,007	..	..	1,008	1,025
Do. South ..	..	16	..	..	16	35	16	..	..	51	..	312	..	..	312	363
Wynaad	..	..	..	..	..	167	..	..	..	167	..	..	..	..	..	167
Nilambur	..	..	..	..	..	69	..	..	..	69	..	..	..	..	..	69
The Nilgiris	..	..	..	..	..	3	5	..	..	8	(*d*) 571	126	..	..	697	705
Palghat	..	..	..	..	..	146	76	..	..	222	33	655	..	..	688	910
Total ..	..	29	..	..	29	424	110	..	..	534	605	2,100	..	..	2,705	3,239
II. Leased Forests—cont.																
Nilambur	..	..	..	..	..	91	3	..	..	94	..	31	..	..	31	125
III. Reserved Lands—Nil.																
IV. Unreserved Lands—cont.																
Mangalore, North ..	..	23	..	11	34	63	23	..	11	97	100	51	..	10	161	258
Do. South ..	(*a*) 1	19	..	3	23	177	19	..	3	199	..	62	..	..	62	261
Wynaad	..	6	..	..	6	..	6	..	..	6	..	18	..	..	18	24
Nilambur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1932-33 and Agency of Exploitation—*cont.*

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
COTACAMUND CIRCLE—*cont.*															
IV. Unreserved Lands—cont.															
The Nilgiris	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palghat	..	5	..	..	5	..	..	..	..	..	..	..	..	..	..
Total ..	235	5	...	..	240	4	..	..	..	4	..	..	..	..	..
Grand Total ..	610	89	..	..	699	41	..	..	..	41	103	..	..	..	103
TOTAL PRESIDENCY.	Engineering division—Nil.														
Reserves	387	410	28	22	847	91	289	5	8	393	149	5	..	..	154
Leased forests	82	4	..	..	86	10	..	..	..	10	2	..	..	..	2
Unreserved lands ..	247	260	51	..	558	9	59	1	..	69	..	5	..	..	5
Grand Total ..	716	674	79	22	1,491	110	348	6	8	472	151	10	..	..	161

Outturn (in thousands of cubic feet, solid) of Timber and Fuel during the year 1932-33 and Agency of Exploitation—*cont.*

Division.	Miscellaneous					Total timber.					Fuel.					
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government	Purchasers.	Free grantees	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Total outturn.
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
OOTACAMUND CIRCLE —*cont.*																
IV. Unreserved Lands—cont.																
The Nilgiris ..	..	..	..	..	..	..	..	..	..	..	..	33	..	..	33	33
Palghat	..	..	1	...	1	..	5	1	..	6	..	78	..	..	78	84
Total ..	1	48	1	14	64	240	53	1	14	308	100	242	..	10	352	660
Grand Total ..	1	77	1	14	93	755	166	1	14	936	705	2,373	..	10	3,088	4,024
TOTAL PRESIDENCY.							Engineering division—Nil.									
Reserves	70	156	10	..	236	648	909	43	30	1,630	990	17,506	158	1	18,655	20,285
Leased forests ..	..	..	..	..	..	94	4	..	..	98	..	31	..	..	31	129
Unreserved lands ..	12	375	65	14	466	268	699	117	14	1,098	101	1,261		10	1,372	2,470
Total ..	82	531	75	14	702	1,010	1,612	160	44	2,826	1,091	18,798	158	11	20,058	22,884

Note for Ootacamund Circle—

(*a*) Includes 62 c. ft. of sandalwood of North Mangalore division, 1,000 c. ft. of South Mangalore division, and 542½ c. ft. of the Nilgiris division (factor of conversion 2 qrs : 1 c. ft.)

(*d*) Two thousand and thirty-five bags of charcoal were manufactured by burning 142 lots of 17,040 c. ft. of fuel.

NOTE.—

GOVERNMENT AGENCY—Actuals.

PRIVATE AGENCY—

Forest Department.—Based on figures furnished by contractors.

REVENUE DEPARTMENT—

North Mangalore—Based on the following factors of conversion :—

Fuel—One cart-load : 20 cubic feet.

Cateehu, Cinnaman and palmyra trees : Rs. 4 : one cubic foot or head load.

Scrub growth or brushwood : As. 10 : 20 cubic feet or one cart-load.

South Mangalore.—Actuals.

Wynaad.—Estimate based on money value for timber at 6 annas per cubic foot and fuel at 8 annas per cart-load of 20 c. ft.

The Nilgiris.—Converted from money value at 4 annas per cart-load of 20 c. ft. of fuel.

Palghat.—Converted from money value at 4 annas per cubic foot of timber and 6 pies per cubic foot of fuel.

RIGHT-HOLDERS AND FREE GRANTEES.—Actuals.

Appendix to Form No. 35.

Specieswar details of outturn of timber (in thousands of cubic feet of log) removed from reserved forests (including leased forests) by Departmental Agency during 1932-33.

Circle.	Name of division.	Santalum album (sandal wood).	Tectona grandis (teak).	Dalbergia latifolia. (rosewood).	Mesua ferrea (nangal).	Hopea parviflora irumbagam.	Shorea robusta (sal).	Pterocarpus santalinus (red sanders).	Terminalia tomentosa (karu-maruthu).	Pterocarpus marsupium (vengai).	Terminalia paniculata (pillamaruthu).	Xylia Xylocarpus (irul).	Miscellaneous.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Waltair	Ganjam	..	..	..	..	..	13	..	..	..	..	..	1	14
	Parlakimedi Maliahs.	..	..	..	..	..	1	..	..	..	..	..	2	3
	Vizagapatam	..	..	..	..	..	6	..	..	..	..	..	..	6
	Godavari (Upper)	..	26	1	..	..	..	..	14	3	..	2	15	61
	Godavari (Lower)	..	..	..	..	..	..	..	..	..	..	..	1	1
	Total	..	26	1	..	..	20	..	14	3	..	2	19	85

Circle.	Name of division.	Sandal wood.	Teak.	Rosewood.	Yegi.	Irumaddi.	Miscellaneous.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Bellary	Kurnool, East	Vide remarks below.*	..	..	1	..	6	7
	Kurnool, South		3	1	3	2	29	38
	Kurnool, West		1	..	1	..	6	8
	Cuddapah, North		..	..	..	..	2	2
	Cuddapah, South		..	..	..	..	2	2
			4	1	5	2	45	57

Note for Bellary Circle—

* As the quantity of sandalwood extracted during the year (710 lb.) is very insignificant (less than 1,000 cubic feet), it is not shown in the return.

Specieswar details of outturn of timber (in thousands of cubic feet of log) removed from reserved forests (including leased forests) by Departmental Agency during 1932–33—*cont.*

Circle.	Name of division.	Santalum album (sandalwood).	Tectona grandis (teak).	Dalbergia latifolia (rosewood).	Mesua ferrea (nangal).	Hopea parviflora (irumbagam).	Shorea robusta (sal).	Pterocarpus marsupium (vengai).	Pterocarpus santalinus (red sanders).	Terminalia tomentosa (karimarudu).	Terminalia paniculata (pillamarudu).	Xylia xylocarpa (irul).	Miscellaneous	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Salem	Chittoor	..	..	..	..	..	..	..	1	..	..	..	..	1
	Vellore, East	3	..	..	..	..	..	..	..	..	..	..	..	3
	Vellore, West	2	..	..	..	..	..	..	..	..	..	..	..	2
	Salem, North	(a) 10	..	..	..	..	..	..	..	..	..	..	..	10
	Salem, Central	(b) 4	..	..	..	..	..	..	..	..	..	..	..	4
	Salem, South	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	19	..	..	..	..	..	..	1	..	..	..	..	(c) 20
Coimbatore	Kollegal	3	(a) 2	(b)	..	..	..	1	..	(b)	..	..	(b)	6
	Coimbatore, North	5	..	..	..	..	..	..	..	..	..	..	3	8
	Do South	..	1	(b)	44	..	..	..	..	1	(b)	..	6	52
	Madura	..	(b)	(b)	..	..	..	(b)	..	..	..	..	1	1
	Tinnevelly	(c)	7	..	..	(b)	..	..	..	..	..	..	1	8
	Total	8	10	..	44	..	..	1	..	1	..	..	11	75

Note for Salem Circle—

(a) Includes 7 thousand cubic feet from unreserves.

(b) Includes 3·312 thousand cubic feet from sivayijama lands.

(c) Ten thousand cubic feet are shown in excess of the figure shown in Form No. 35—vide (a) and (b).

NOTE.—Timber less than 500 cubic feet ignored.

Note for Coimbatore Circle—

(a) Includes 577 cubic feet of teak spokes and felloes obtained from top-ends.

(b) Omitted being less than 1,000 cubic feet.

(c) Four hundred and fifty-five cubic feet of sandalwood omitted being less than 1,000 cubic feet.

Species-war details of outturn of timber (in thousands of cubic feet of log) removed from reserved forests (including leased forests) by Departmental Agency during 1932–33—*cont.*

Circle.	Name of division.	Santalum album (sandalwood).	Tectona grandis (teak).	Dalbergia latifolia (rosewood).	Mesua ferrea (nangal).	Hopea parviflora (irumbagam).	Shorea robusta (sal).	Pterocarpus marsupium (vengai).	Pterocarpus santalinus (red sanders).	Terminalia tomentosa (karimaruda).	Terminalia paniculata (pillamaruda).	Xylia xylocarpus (irul).	Miscellaneous.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Ootacamund	Mangalore, North	..	·1	·1	..	..	..	..	..	·1	·9	..	2·5	3·7
	Do. South	..	2	·2	..	16·90	..	0·06	..	3·30	1·0	10·10	2·0	34·56
	Wynaad	..	28	8·0	73	..	..	3	..	51	..	..	34	(a) 207
	Nilambur	..	77·08	·32	..	..	..	..	..	8·77	22·96	46·93	4·68	160·74
	The Nilgiris	..	1·6	·2	..	..	..	·3	..	·3	..	..	..	2·9
	Palghat	..	0·50	0·50	88	..	..	..	..	..	..	..	57	146
	Total	·5	119·28	9·32	161	16·90	..	3·36	..	63·47	24·86	57·03	100·18	554·90
Grand total, Presidency		27·5	159·28	11·32	205	16·90	20	7·36	1	78·47	24·86	64·03	182·18	791·90

Note for Ootacamund Circle—

(a) Seventy-nine thousand cubic feet shown as sawn or squared timber in Form No. 35 are converted into their log equivalents in the ratio of 1 cubic foot sawn or squared timber to 1½ cubic feet, i.e., thirty-nine thousand cubic feet are shown in excess of the figure shown in Form No. 35

ANNUAL FORM No. 36.

Forest Department, Madras Presidency.

Outturn of Minor Forest Produce during the year 1932-33

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
	Reserved Forests.	Rs.	Rs.	Rs.	Rs.	Rs
Waltair Circle.	Bamboos	218	70,536	1,020	390	72,164
	Grazing	..	1,06,110	22,337	585	1,29,032
	Other produce.					
	Grass (hay, thatch, etc.) ..	2	513	114	..	629
	Tamarind, soapnuts, gallnuts, nux-vomica, shekoi, etc.	8,830	2,015	..	..	10,845
	Horns, skins, wax, resin, gum, honey, etc.	..	97	..	..	97
	Tangedu, etc., barks and fibres, sarasaparilla, etc.	619	2,307	..	..	2,926
	Date and palmyra leaves, stalks, moduga leaves, etc.	7	137	..	..	144
	Manure leaves, thorns, etc. ..	1	206	..	..	207
	Stone, gravel, etc.	..	854	..	..	854
	Miscellaneous	1,479	25,433	9	38	26,959
	Total, Other produce ..	10,938	31,562	123	38	42,661
	Total, Reserved Forests ..	11,156	2,08,208	23,480	1,013	2,43,857
	Reserved Lands.					
	Bamboos	..	52,298	..	..	52,298
	Other produce.					
	Grass (hay, thatch, etc.) ..	..	99	..	..	99
	Tamarind, soapnuts, gallnuts, nux-vomica, shekoi, etc.	..	22,543	..	..	22,543
	Horns, skins, wax, resin, gum, honey, etc.	..	173	..	..	173
	Tangedu, etc., bark and fibres.	..	5	..	..	5
	Date and palmyra leaves, etc. ..	..	309	..	..	309
	Total, other produce ..	..	23,129	..	..	23,129
	Total, Reserved Lands ..	..	75,427	..	..	75,427
	Unreserved Forest.					
	Bamboos	32	3,121	38	..	3,191

Outturn of Minor Forest Produce during the year 1932-33—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
	Unreserves—cont.	Rs.	Rs.	Rs.	Rs.	Rs.
Waltair Circle—*cont.*	Other produce.					
	Grass (hay, thatch, etc.) ..	4	197	..	..	201
	Tamarind, soapnuts, gallnuts, nux-vomica, shekoi, etc.	..	4,265	..	..	4,265
	Horns, skins, wax, resin, gum, honey, etc.	..	52	..	..	52
	Tangedu, etc., barks and fibres, sarasaparilla, etc.	..	1,658	..	..	1,658
	Date and palm leaves, stalks and moduga, leaves.	..	259	782	..	1,041
	Stone, gravel, etc.	..	861	..	..	861
	Tree owners' fees	..	33,850	21	..	33,871
	Miscellaneous	46	7,484	..	..	7,530
	Total, other produce ..	50	48,626	803	..	49,479
	Total, Unreserves ..	82	51,747	841	..	52,670
	Abstract.					
	Bamboos	250	1,25,955	1,058	390	1,27,653
	Grazing	..	1,06,110	22,337	585	1,29,032
	Other minor produce	10,988	1,03,317	926	38	1,15,269
	Total ..	11,238	3,35,382	24,321	1,013	3,71,954
Bellary Circle.	*Reserves.*					
	Bamboos	1,630	69,952	210	1	71,793
	Grazing	..	1,55,688	..	4,252	1,59,940
	Fodder grass	..	1,248	..	..	1,248
	Penning fees	..	4,687	..	..	4,687
	Total ..	..	1,61,623	..	4,252	1,65,875
	Minor forest produce.					
	Grass (hay, thatch, etc.) ..	83	574	6	..	663
	Tamarind, soapnuts and nux-vomica.	..	2,409	..	..	2,409
	Stone, gravel and earth ..	..	3,600	..	..	3,600
	Date, palmyra and plate leaves..	..	822	30	..	852
	Tooki leaves	..	5,928	..	..	5,928
	Horns, honey, wax, resin, gum and gallnuts.	..	1,298	..	..	1,298
	Tangedu, rela, yepi and seeds..	61	5,698	..	..	5,759
	Manure leaves, bats' dung and thorns.	..	1,804	..	1	1,805
	Miscellaneous including tree-tapping fees and amaroy.	..	4,419	..	..	4,419
	Total of minor forest produce.	144	26,552	36	1	26,733
	Grand total of grazing and minor forest produce of Reserves.	144	1,88,175	36	4,253	1,92,608

Outturn of Minor Forest Produce during the year 1932–33—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
		Rs.	Rs.	Rs.	Rs.	Rs.
Bellary Circle—*cont.*	*Unreserves.*					
	Minor forest produce.					
	Thatch grass and palmyra leaves.	..	10	65	..	75
	Tamarind, soapnuts and nux-vomica.	..	31,663	..	..	31,663
	Stone, gravel and earth ..	..	5,089	..	..	5,089
	Date, palmyra and plate leaves.	..	27	17	..	44
	Manure leaves, bats' dung and thorns.		236	..	..	236
	Tangedu, rela, yepi and seeds ..	8	46,242	..	..	46,250
	Tooki leaves	..	2,442	..	..	2,442
	Miscellaneous including tree-tapping fees.	..	1,06,490	..	..	1,06,490
	Total of minor forest produce of Unreserves.	8	1,92,199	82	..	1,92,289
	Grand total of bamboos of Reserves and Unreserves.	1,630	69,952	210	1	71,793
	Grand total of grazing and minor forest produce of Reserves and Unreserves.	152	3,80,374	118	4,253	3,84,897
Salem Circle	*Reserved Forests.*					
	Bamboos	5	1,23,029	54	..	1,23,088
	Grass and grazing	..	1,76,868	..	264	1,77,132
	Other minor produce.					
	Avaram, konnai, etc., barks ..	1	4,389	..	..	4,390
	Date, palmyra, tooki plate, etc., leaves.	..	256	..	..	256
	Manure leaves	..	5,118	..	..	5,118
	Stone, gravel, sand, etc. ..	..	2,504	..	..	2,504
	Soapnuts, gallnuts, tamarind, nux-vomica, etc.	..	11,592	..	..	11,592
	Lac	227	..	..	..	227
	Miscellaneous	408	10,748	..	..	11,156
	Total ..	636	34,607	..	..	35,243
	Reserved Lands.					
	Grass and fodder	..	304	..	..	304
	Manure leaves	..	2,160	..	..	2,160
	Total ..	..	2,464	..	..	2,464
	Unreserves.					
	Bamboos	..	40	158	..	198

Outturn of Minor Forest Produce during the year 1932-33—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
		Rs.	Rs.	Rs.	Rs.	Rs.
	Unreserves—cont.					
Salem Circle—*cont.*	Other produce.					
	Avaram, konnai, etc., barks ..	..	2,913	..	..	2,913
	Date, palmyra, tooki plate, etc.	..	1,825	407	..	2,232
	Manure leaves	..	513	..	..	513
	Stone, gravel, sand, etc. ..	..	3,438	..	..	3,438
	Soapnut, gallnuts, tamarind, etc.	..	173	..	..	173
	Miscellaneous including tree tapping fees, etc.	..	65,885	14	..	65,899
	Total ..	..	74,747	421	..	75,168
	Leased forests—Nil.					
	Abstract.					
	Bamboos	5	1,23,069	212	..	1,23,286
	Grass and grazing	..	1,77,172	..	264	1,77,436
	Other produce	636	1,11,514	421	..	1,12,571
	Grand Total ..	641	4,11,755	633	264	4,13,293
	Reserved Forests.					
Coimbatore Circle.	Bamboos	..	40,714	..	..	40,714
	Grazing	..	1,16,792	15	1,669	1,18,476
	Fodder grass	..	1,076	..	..	1,076
	Total ..	..	1,17,868	15	1,669	1,19,552
	Other produce.					
	Tamarind, gallnuts, soapnuts, cardamoms, dammer, vembadam, avaram barks konnai, etc.	..	51,086	..	..	51,086
	Pungam and sandalseeds ..	19	1,551	..	..	1,570
	Date leaves, korai, eachem grass, kaya leaves, manure leaves, and usufructs of palmyra.	..	3,879	..	610	4,489
	Stones, gravel, tree mess, usufructs of trees, metal and rough stone.	..	7,079	..	..	7,079
	Deer horns, sambur horns, honey, shekoi, wax, tusks, etc.	859	810	..	..	1,669
	Miscellaneous	..	723	..	..	723
	Total ..	878	65,128	..	610	66,616
	Unreserved Land.					
	Bamboos	..	4	..	..	4
	Other produce.					
	Avaram, konnai, amroy ..	..	2,571	..	..	2,571
	Sivayijama tree tax, fees on tree stones, gravel, rough stone.	..	7,529	..	..	7,529
	Usufructs of trees, palmyras tamarind, gallnuts,	..	11,217	..	..	11,217

Outturn of Minor Forest Produce during the year 1932-33—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
	Unreserved Land—cont.					
	Other produce—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.
Coimbatore Circle—*cont.*	Kaya leaves, korai grass, manure leaves sambur and fodder grass.	..	4,232	..	..	4,232
	Miscellaneous	..	3,067	..	..	3,067
	Total ..	..	28,616	..	..	28,616
	Abstract.					
	Bamboos	..	40,718	..	..	40,718
	Grazing and fodder grass ..	..	1,17,868	15	1,669	1,19,552
	Other produce	878	93,744	..	610	95,232
	Total ..	878	2,52,330	15	2,279	2,55,502
Ootacamund Circle.	*Reserved Forests.*					
	Bamboos	4,397	13,772	25	..	18,194
	Grazing and fodder grass ..	176	28,167	798	..	29,141
	Other minor produce—*cont.*					
	Stones, gravel, etc.	..	442	..	..	442
	Canes	8	85	1	..	94
	Wood oil	..	228	..	..	228
	Catechu trees	..	2,263	..	..	2,263
	Cardamoms	..	1,657	..	..	1,657
	Other items including tusks.	1,143	13,066	35	..	14,244
	Total ..	1,151	17,741	36	..	18,928
	Total, Reserves ..	5,724	59,680	859	..	66,263
	Reserved Lands.					
	Bamboos	..	69	..	..	69
	Grazing and fodder grass ..		..	409	..	409
	Total for Reserved Lands ..	..	69	409	..	478
	Leased Forests.					
	Bamboos	1,179	379	..	..	1,558
	Other minor produce	..	55	..	..	55
	Total for Leased Forests ..	1,179	434	..	..	1,613
	Unreserved Lands.					
	Bamboos	..	18	..	..	18

Outturn of Minor Forest Produce during the year 1932-33—*cont.*

Circle.	Description of produce.	Produce removed or utilized. By Government agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total. Value.
	Unreserved Lands—cont.					
	Other minor produce.	Rs.	Rs.	Rs.	Rs.	Rs.
Ootacamund Circle—*cont.*	Stones, gravel, etc.	...	1,265	..	..	1,265
	Catechu trees	.	17	..	..	17
	Other items	..	5,114	..	..	5,114
	Total, for Unreserved Lands ..	..	6,414	..	..	6,414
	Abstract.		..	..		
	Bamboos	5,576	14,238	·25	..	19,839
	Grazing and fodder grass ..	176	28,167	1,207	..	29,550
	Other produce	1,151	24,192	..36	....	25,379
	Grand total ..	6,903	66,597	1,268	....	74,768
Total, Presidency.	*Reserved Forests.*			..		
	Bamboos	6,250	3,18,003	1,309	391	3,25,953
	Grazing	176	5,90,636	23,150	6,770	6,20,732
	Other produce	13,747	1,75,590	195	649	1,90,181
	Reserved Lands.			..	..	
	Bamboos	..	52,367	..	..	52,367
	Grazing	..	304	409	..	713
	Other produce	..	25,289	..	..	25,289
	Unreserved Lands.			..		
	Bamboos	32	3,183	196	..	3,411
	Grazing	..	..	..	..	..
	Other produce	58	3,50,584	1,306	..	3,51,948
	Leased Forests.					
	Bamboos	1,179	379	..	..	1,558
	Grazing	..	..	..	..	..
	Other produce	..	55	..	..	55
Grand total, Presidency.	Bamboos	7,461	3,73,932	1,505	391	3,83,289
	Grazing	176	5,90,940	23,559	6,770	6,21,445
	Other produce	13,805	5,51,518	1,501	649	5,67,473
	Total ..	21,442	15,16,390	26,565	7,810	15,72,207

ANNUAL FORM No. 37.

Forest Department, Madras Presidency.

Account of Timber, Fuel, Bamboos and Minor Produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1932–33.

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
		TIMBER (IN THOUSANDS OF CUBIC FEET).			
Waltair Circle.					
Ganjam	..	15	15	(*a*) 8 (*b*) 1 (9)	6
Parlakimedi Maliahs ..	..	3	3	(*a*) 3	..
Vizagapatam	..	13	13	(*a*) 11	2
Godavari, Upper	6	69	75	(*a*) 55 (57) (*b*) 2	18
Do. Lower	8	1	9	(*a*) 7 (*d*)	2
Total ..	14	101	115	87	28
		SANDAL WOOD.			
Vizagapatam	..	2 trees 8 qrs.	2 8 qrs.	(*a*) 2 8 qrs.	..
		TIMBER (IN THOUSANDS OF CUBIC FEET).			
Bellary Circle.					
Anantapur	..	..	..	..	..
Kurnool, East	2	7	9	(*a*) 9	..
Do. South	22	38	60	(*a*) 58 (*b*) 1	1
Do. West	3	8	11	(*a*) 7	4
Cuddapah, North ..	..	2	2	(*b*) 1	1
Do. South	..	2	2	(*a*) 2	..
Total ..	27	57	84	78	6
Salem Circle.					
Chittoor	..	1	1	1	..
Vellore, East	2	3	5	5	..
Do. West	..	2	2	1	1
Salem, North	3	10	13	12	1
Do. Central	..	4	4	4	..
Do. South	..	..	..	..	..
Total ..	5	20	25	23	2
Coimbatore Circle.					
Kollegal	..	(*a*) 6	6	(*a*) 5	1
Coimbatore, North ..	2	(*a*) & (*b*) 13	14	14	1
Do. South ..	169	6	175	(*c*) 92	83
Valparai Sawn timber (scantlings)	..	2	2	2	..
Madura	1	1	2	1	1
Tinnevelly	1	8	9	2	7
Forest Utilization Officer Sawn timber, Pollachi Depot	A 3,339	..	3,339	1,756	1,583
Total ..	3,512	36	3,548	1,872	1,676

Note for Waltair and Bellary Circles.—(*a*) Sold departmentally. (*b*) Used departmentally.
(*c*) Written off.

Account of Timber, Fuel, Bamboos and Minor Produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1932-33—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year, in forest and sale depots.
		SLEEPERS (IN NUMBERS).			
Coimbatore, South ..	..	..	..	..	..
Valparai, B.G.	3,425	11,466 (*d*) 346	14,891 (*d*) 346	9,910	4,981 (*d*) 346
Valparai, M.G.	1,755	3,201 (*d*) 484	4,956 (*d*) 484	2,358	2,598 (*d*) 484
		TIMBER (IN THOUSANDS OF CUBIC FEET).			
Ootacamund Circle.					
Mangalore, North	42	67	109	(*a*) 74 (*b*) 1	34 ..
Mangalore, South ..	108	211	(*i*) 319	(*a*) 150 (*b*) 3 (*c*) 1 (*d*) 6 (*e*) .. 43 (*f*) 2	114
Forest Utilization Officer (sawn timber).	11	6	17	17	
Total, for Mangalore, South.	119	217	336	222	114
Wynaad	386	170	556	(*a*) 293 (*b*) 12 (*c*) 37 (*g*) 2 (*h*) 2	210
Forest Utilization Officer (sawn timber).	1	..	1	·5	·5
Total, for Wynaad ..	387	170	557	346·5	210·5
Nilambur	405	166	571	(*a*) 382 (*b*) 2 (*c*) 6	181
Forest Utilization Officer (sawn timber).	3	..	3	3	..
Total, for Nilambur ..	408	166	574	393	181
The Nilgiris	56	3	59	(*a*) 46	13
Palghat	13	146	159	(*a*) 74 (*g*) 65	20 ..
Total for Ootacamund Circle.	1,025	769	1,794	1,221·5	572·5
Total, Presidency ..	A 1,244 + 3,339	983	5,566	3,282	2,284

Note for Ootacamund Circle.—(*a*) Sold. (*b*) Used for departmental works. (*c*) Written off.
(*d*) Handed to Forest Utilization Officer.
(*e*) Supplied to Railways.
(*f*) Handed to District Forest Officer, North Mangalore.
(*g*) Deficits due to sawing, resquaring, difference in remeasurement, etc.
(*h*) Overseas consignment.
(*i*) Includes 960 cubic feet of sandalwood.

A. Represents 3,339 thousands of cubic feet (Forest Utilization Officer) sawn timber, Pollachi Depot.

Account of Timber, Fuel, Bamboos and Minor Produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1932-33—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
		FUEL (IN THOUSANDS OF CUBIC FEET).			
Waltair Circle.					
Ganjam	3	10	13	(a) 7	6
Parlakimedi Maliahs ..	43	19	62	(a) 54	8
Vizagapatam	1	5	6	(a) 4	2
Godavari, Upper	..	4	4	(a) 4	..
Do. Lower	21	44	65	(a) 26	39
Guntur	(d) 10	10	20	(a) 12	8
Nellore	4	12	16	(a) 11 (b) 4	1
Total ..	82	104	186	122	64
Bellary Circle.					
Anantapur	1	3	4	(a) 2	2
Kurnool, East	..	11	11	(a) 9	2
Do. South	..	5	5	(a) 1	4
Do. West	62	83	145	(a) 85	60
Cuddapah, North	8	30	38	(a) 19	19
Do. South	6	53	59	(a) 33	26
Total ..	77	185	262	149	113
Salem Circle.					
Chittoor	11	22	33	15	18
Vellore, East	22	20	42	30	12
Do. West	..	9	9	1	8
Salem, North	2	6	8	6	2
Do. Central	18	18	36	19	17
Do. South	11	13	24	11	13
Total ..	64	88	152	82	70
Coimbatore Circle.					
Coimbatore, South ..	..	1	1	1	..
Madura	1	(e) 8	(e) 9	(f) 6	(g) 3
Total ..	1	9	10	7	3
Ootacamund Circle.					
Mangalore, North	2	101	103	(a) 102	1
Do. South	8	..	8	(a) 8	..
Nilgiris	119	571	690	599	91
Palghat	..	33	33	(a) 33	..
Total ..	129	705	834	742	92
Grand total, Presidency ..	(d) 353	1,091	1,444	1,102	342

Note for Waltair Circle.—(a) Sales. (b) Used departmentally. (c) Written off.
(d) Includes one thousand cubic feet not shown in 1931-32.

Account of Timber, Fuel, Bamboos and Minor Produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1932-33—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
		BAMBOOS (IN NUMBER).			
Waltair Circle.					
Ganjam	..	9,610	9,610	(*b*) 9,610	..
Parlakimedi Maliahs	..	..	..	..	..
Vizagapatam	..	950	950	(*a*) 950	..
Godavari, Upper	..	4,197	4,197	(*b*) 4,197	..
Do. Lower	..	3,763	3,763	(*a*) 3,763	..
Guntur	..	6	6	(*a*) 6	..
Nellore	..	59	59	(*c*) 59	..
Total	..	18,585	18,585	18,585	..
Bellary Circle.					
Anantapur	..	200	200	(*b*) 200	..
Kurnool, East	..	34,402	34,402	(*a*) 33,531 (*b*) 871	..
Do. South	..	..	..	..	..
Do. West	239	25,348	25,587	(*a*) 239 (*b*) 25,148	200
Cuddapah, North	..	3,000	3,000	(*b*) 3,000	..
Do. South	..	3,000	3,000	(*b*) 3,000	..
Total	239	65,950	66,189	65,989	200
Salem Circle.					
Chittoor	..	60	60	60	..
Vellore, East	..	47	47	47	..
Do. West	..	..	..	..	..
Salem, North	..	200	200	200	..
Do. Central	..	..	..	..	..
Do. South	..	455	455	455	..
Total	..	762	762	762	..
Ootacamund Circle.					
Mangalore, North	..	520	520	(*b*) 436	84
Do. South	..	3,780	3,780	3,780	..
Wynaad	525	11,952	12,477	12,477	..
Nilambur	189	68,858	69,047	(*a*) 65,299 (*b*) 2,603 (*c*) 1,001	244
Palghat	4,387	5,850	10,237	(*a*) 8,962 (*b*) 1,275	..
Total	5,101	90,960	96,061	95,733	328
Grand total, Presidency	5,340	176,257	181,597	181,069	528

Note for Waltair Circle.—(*a*) Sold departmentally. (*b*) Used departmentally (*c*) Written off.

Account of Timber, Fuel, Bamboos and Minor Produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1932-33—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
MINOR FOREST PRODUCE (IN QUARTERS OF 28 LB.).					
Waltair Circle.					
Ganjam	..	179	179	(*b*) 179	..
Parlakimedi Maliahs ..	20	42	62	(*a*) 52	10
Vizagapatam	39	270	309	(*a*) 203	106
Godavari, Upper	433	2,201	2,634	(*b*) 2,031	603
Do. Lower	134	154	288	(*a*) 129 (*c*) 43	116
Guntur	4	581	585	(*a*) 448	137
Nellore	7,872	14,278	22,150	(*a*) 9,054 (*b*) 166 (*c*) 6,548	6,382
Total ..	8,502	17,705	26,207	18,853	7,354
Bellary Circle.					
Anantapur	9	85	94	(*b*) 62	32
Kurnool, East	15	133	148	(*b*) 147	1
Kurnool, South	300	309	609	(*b*) 300	309
Kurnool, West	107	208	315	(*b*) 244	71
Cuddapah, North	264	560	824	(*a*) 8 (*b*) 632	184
Cuddapah, South	204	731	935	(*b*) 719	216
Total ..	899	2,026	2,925	2,112	813
Salem Circle.					
Chittoor	80	89	169	136	33
Vellore, East	437	190	627	554	73
Do. West	..	101	101	87	14
Salem, North	349	376	725	562	163
Do. Central	91	88	179	151	28
Do. South	108	90	198	148	50
Total ..	1,065	934	1,999	1,638	361

Note for Waltair Circle.—(*a*) Sold departmentally. (*b*) Used departmentally. (*c*) Written off.
Note for Bellary Circle.—(*a*) Sold departmentally. (*b*) Used departmentally.
Note for Salem Circle.—Timber includes sandalwood.

* One quarter 3 lb. of lac was omitted in the district figure last year.

Account of Timber, Fuel, Bamboos and Minor Produce cut or collected by Government agency and brought to depot, sold locally or otherwise disposed of during 1932-33—*cont.*

Name of district.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
MINOR FOREST PRODUCE (IN QUARTERS OF 28 LB.)—*cont.*					
Coimbatore Circle.					
Coimbatore, North ..	20	166	186	86	100
Do. South ..	(*h*) 48	531	579	(*i*) 191	388
Madura	3	96	99	49	50
Tinnevelly	8	244	252	95	157
Total ..	79	1,037	1,116	421	695
Ootacamund Circle.					
Mangalore, North	6	..	6	1	5
Do. South	..	1	1	1	..
Wynaad	3	1	4	3	1
The Nilgiris	189	350	539	475	64
Palghat	..	1	1	1	..
Total ..	198	353	551	481	70
Grand total, Presidency. (*k*)	10,743	22,055	32,798	23,506	9,293

Note for Coimbatore Circle.—Under other minor produce are included seeds, one measure being equal to one lb.

(*a*) Includes sandalwood, 2 quarters being equal to 1 cubic foot.
(*b*) Includes sandalwood received from Kollegal.
(*c*) Includes (1) 2,838 cubic feet utilized departmentally;
(2) 8,809 cubic feet eliminated from Form No. 6, the quantity having been sold and value booked in commercial concern in 1931-32; and
(3) 11,502 cubic feet written off.
(*d*) Represent rejected sleepers.
(*e*) Includes 5,000 lb. of charcoal (40 lb. = 1 cubic foot).
(*f*) Includes 1,350 lb. of charcoal (do.).
(*g*) Includes 3,650 lb. of charcoal (do.).
(*h*) Revised figure.
(*i*) Includes 16 bags of seeds sent to the Forest Research Institute, Dehra Dun, 4 to the Range Officer, Etawah, and 3 to the District Forest Officer, North Coimbatore.

Note for Ootacamund Circle.—(*a*) Sold. (*b*) Used for departmental works. (*c*) Written off.
(*k*) Revised figures adopted.

ANNUAL FORM No. 38.

Forest Department, Madras Presidency.

Statement showing the value of timber and other produce at sale depots for the year 1932–33.

District.	Description of timber or produce.	On hand at commencement of the year. Number.	Cubic feet.	Value.	On hand at close of the year. Number.	Cubic feet.	Value.	Difference in value. In favour of the year.	Against the year.
	Waltair Circle.			RS.			RS.	RS.	RS.
Parlakimedi.	Timber ..	258	283	194	111	73	37	..	157
Vizagapatam.	Do. ..	..	35	10	36	644	427	417	..
Godavari Lower.	Do. ..	660	3,824	1,484	358	1,571	350	..	1,134
Nellore ..	Do. ..	..	..	..	..	32	12	12	..
	Total timber ..	918	4,142	1,688	505	2,320	826	..	862
Parlakimedi.	Fuel	..	43,300	1,732	278	7,800	834	..	898
Vizagapatam.	Do.	..	600	32	..	1,640	68	36	..
Nellore ..	Do.	..	400	63	..	1,234	493	430	..
	Total fuel ..	..	44,300	1,827	278	10,674	1,395	..	432
			QRS.			QRS.			
Parlakimedi.	Minor forest produce. ..		20	136	..	10	99	..	37
Vizagapatam.	Do. ..		34	18	..	86	46	28	..
Nellore ..	Do. ..		7,872	4,406	..	6,382	3,673	..	733
	Total minor forest produce. ..		7,926	4,560	..	6,478	3,818	..	742
	Grand total, Waltair Circle. ..		..	8,075	..	..	6,039	..	2,036
	Bellary Circle.								
Kurnool, South.	Timber ..	..	22,574	8,200	1	6	10	..	8,190
Cuddapah, South.	Do. ..	..	..	..	97	122	242	242	..
	Total ..	..	22,574	8,200	98	128	252	242	8,190
Kurnool, South.	Fuel	..	84	1	..	..	..	..	1
	Total ..	..	84	1	..	..	..	..	1
	Grand total ..	..	22,658	8,201	98	128	252	242	8,191
	Salem Circle.								
Chittoor ..	Timber ..	47	229	206	5	7	30	..	176
	Fuel	..	10,900	1,022	..	17,918	1,680	658	..
Vellore, East.	Timber ..	..	1,116	8,917	..	119	2,571	..	6,346
			QRS.			QRS.			
	Minor forest produce. ..		270	86	..	73	37	..	49

Statement showing the value of timber and other produce at sale depots for the year 1932-33—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year. Number.	Cubic feet.	Value. Rs.	On hand at close of the year. Number.	Cubic feet.	Value. Rs.	Difference in value. In favour of the year. Rs.	Against the year. Rs.
	Salem Circle —cont.								
Vellore, West.	Timber ..	..	..	..	..	137	3,177	3,177	..
	Fuel ..	..	..	..	..	7,874	125	125	..
	Minor forest produce.	..	..	..	..	Qrs. 14	14	14	..
Salem, North.	Timber ..	..	2,979	6,746	..	814	6,052	..	694
	Fuel	..	2,484	51	..	2,106	30	..	21
	Minor forest produce.	..	Qrs. 349	854	..	Qrs. 163	931	77	..
Salem, Central.	Timber ..	..	47	624	..	149	3,514	2,890	..
						+ 34	16	16	
	Fuel	..	18,000	549	..	17,312	494	..	55
	Minor forest produce.	..	Qrs. 90	119	..	Qrs. 28	36	..	83
			+ 1	+ 8		+ 1	+ 8		
Salem, South.	Timber ..	..	655	1,225	..	647	1,202	..	23
	Fuel	..	10,567	276	..	12,954	318	42	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor forest produce	..	Qrs. 108	75	..	50	35	..	40
Total ..	Timber ..	..	5,026	17,718	..	1,907	16,562	..	1,156
	Fuel	..	41,951	1,898	..	58,164	2,647	749	..
	Minor forest produce.	..	Qrs. 818	1,142	..	Qrs. 329	1,061	..	81
	Grand total ..	..	..	20,758	..	..	20,270	..	488
	Coimbatore Circle.								
Kollegal..	Timber ..	..	..	..	..	257	165	165	..
	Spokes and felloes.	..	..	..	Sets. 50	550	449	449	..
Coimbatore, North.	Timber ..	..	347	347	..	236	236	..	111
	Sandalwood ..	..	1,485	32,670	..	441	9,702	..	22,968
	Sambur and deer horns.	Qrs. 15	..	41	Qrs. 81	..	212	171	..
	Gallnuts ..	..	..	..	5	..	7	7	..
	Honey and wax.	..	..	..	9	..	35	35	..
	Sandal seeds ..	Mds. (a) 131	..	4	Mds. 140	..	4	..	..
Coimbatore, South.	Timber ..	..	63,156	89,362	..	31,654	31,654	..	57,708
	Sawn timber ..	..	3,339	3,330	..	1,583	1,583	..	1,747
	Spokes and felloes.	Sets 201	2,211	3,388	Sets. 100	1,100	1,500	..	1,888
	Sleepers— (b)	(c)			(d)				
	B.G. ..	3,291	..	27,554	4,944	..	29,053	1,499	..
	M.G. ..	(c) 1,648	..	..	(d) 2,543				

Statement showing the value of timber and other produce at sale depots for the year 1932–33—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year. Number.	Cubic feet.	Value.	On hand at close of the year. Number.	Cubic feet.	Value.	Difference in value. In favour of the year.	Against the year.
				Rs.			Rs.		Rs.
	Coimbatore Circle—cont.								
Madura ..	Timber	..	416	153	..	292	95	..	58
	Fuel	..	515	64	..	3,350	419	355	..
	Charcoal	..	..	..	..	91	61	61	..
	Brake poles ..	295	295	74	218	248	62	..	12
	Sandalwood	..	..	..	..	1	41	41	..
		MRS.			LB.				
	Seeds	(*c*) 18	..	1	418	..	304	303	..
		LB.			LB.				
	Lac	67	..	21	1,389	..	434	413	..
Tinnevelly.	Timber	..	875	209	..	6,579	1,190	981	..
	Sandalwood ..	..	31	171	..	7	150	..	21
		LB.							
	Seeds	234	..	292	..	..	..	..	292
Abstract ..	Timber	..	64,794	90,071	..	39,018	33,340	..	56,731
	Sawn timber ..	..	3,339	3,330	..	1,583	1,583	..	1,747
	Brake poles ..	295	295	74	..	248	62	..	12
	Sandalwood ..	..	1,516	32,841	..	449	9,893	..	22,948
		SETS.			SETS.				
	Spokes and felloes.	201	2,211	3,388	150	1,650	1,949	..	1,439
	Sleepers—	QRS.							
	B.G. ..	3,291	}	27,554	4,944	}	29,053	1,499	..
	M.G. ..	1,648			2,643				
	Fuel	..	515	64	..	3,350	419	335	..
	Charcoal ..	..	..	..	..	91	61	61	..
		QRS.			QRS.				
	Sambur and deer horns.	15	..	41	81	..	212	171	..
					QRS.				
	Honey and ware.	..	..	..	9	..	35	35	..
					QRS.				
	Gallnuts ..	..	..	..	5	..	7	7	..
		MRS.			MRS.				
	Seeds	149	}	297	160	..	}	11	..
		LB.	..		LB.		308		
		234			418	..			
		LB.			LB.				
	Lac	67	..	21	1,389	..	434	413	..
	Total ..	..	..	1,57,681	..	..	77,356	..	80,325

Note for Coimbatore Circle.

Factor of conversion—

Sandalwood 2 qrs. = 1 c.ft. 1 set of spokes and felloes = 11 c.ft.

Charcoal 40 lb. = 1 c.ft. 1 brake pole = 1 c.ft.

(*a*) Omitted in the return for 1931–32.

(*b*) Closing balance with the Forest Utilization Officer in 1931–32 shown as opening balance in the district for 1932–33.

(*c*) Includes 396 B.G. and 163 M.G. rejections.

(*d*) Includes 443 B.G. and 264 M.G. rejections.

(*e*) One measure of seeds is equal to 1 lb.

Statement showing the value of timber and other produce at sale depots for the year 1932-33—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
				Rs.			Rs.	Rs.	Rs.
	Ootacamund Circle.								
Mangalore, North.	Timber ..	..	38,337	28,812	..	24,485	15,871	..	12,941
Mangalore, South.	Do. ..	..	19,994	26,450	..	35,132	32,365	5,915	..
Forest Utilization division.	Sawn Timber.	..	11,153	11,270	..	..	..	..	11,270
	Total, Mangalore, South.	..	31,147	37,720	..	35,132	32,365	..	5,355
Wynaad .. Forest Utilization division.	Timber ..	..	165,417	3,21,421	..	19,748	42,762	..	2,78,659
	Sawn Timber.	..	1,438	900	..	749	350	..	550
	Total, Wynaad.	..	166,855	3,22,321	..	20,497	43,112	..	2,79,209
Nilambur ..	Timber ..	..	*138,119	79,424	..	59,940	1,15,870	36,446	..
	Total for Ootacamund Circle.	..	374,458	4,68,277	..	140,054	2,07,218	..	2,61,059
Total, Presidency.	Timber ..	..	..	6,53,141	..	..	3,00,496	..	3,52,645
	Fuel	..	..	3,790	..	..	4,461	671	..
	Minor forest produce.	..	..	6,061	..	..	5,936	..	125
	Grand total, Presidency.	..	..	B. 6,62,992	..	..	3,10,893	..	3,52,099

* Includes Forest Utilization Officer's sawn timber of 2,772 c.ft.

B. Revised figure adopted.

Annual Form No. 39.

Forest Department, Madras Presidency.

Summary of Revenue of the different districts, 1932–33.

Budget heads.	Direction.	Ganjam.	Parlakimedi.	Vizagapatam.	Golgonda Agency.	Godavari, Upper.	Godavari, Lower.	Guntur	Nellore.	Total
Waltair Circle.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs	Rs.
VIII. Forest Receipts.										
(*a*) Timber and other produce removed from the forests by Government Agency—										
Sandalwood ..	..	..	..	50	..	..	4	..	..	54
Other produce—										
Timber ..	..	2,616	2,317	4,416	2,977	32,311	3,295	34	1	47,967
Firewood and charcoal.	..	782	1,968	82	..	32	2,482	18	767	6,131
Bamboos ..	..	5	..	..	..	..	..	..	..	5
Other minor produce.	(N) 1,299	..	175	67	..	..	7	9	5,742	7,289
Total ..	1,299	3,403	4,460	4,555	2,977	32,343	5,784	61	6,510	61,392
Total, (*a*) ..	1,299	3,403	4,460	4,605	2,977	32,343	5,788	61	6,510	61,446
(*b*) Timber and other produce removed from the forests by consumers or purchasers—										
Forest Department—										
Timber ..	..	14,225	6,707	225	388	19,704	12,769	452	78	54,518
Firewood and charcoal.	(D) 2	29,566	4,558	5,436	..	206	53,718	15,622	58,343	1,67,440
Bamboos ..	..	6,137	4,161	18,580	430	17,338	76,180	3,060	..	1,25,876

Summary of Revenue of the different districts, 1932-33—*cont.*

Budget heads.	Direction.	Ganjam.	Parlakimedi.	Vizagapatam.	Golgonda Agency.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total.
WALTAIR CIRCLE —*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS	RS.	RS.	RS.
VIII. Forest Receipts —cont.										
(*b*) Timber and other produce removed from the forests by consumers or purchasers—*cont.*										
Forest Department—*cont.*										
Grazing and fodder grass.	..	9,799	1,543	2,466	266	8,652	14,995	45,002	23,384	1,06,107
Other minor produce.	(D) 115	1,117	13,472	7,242	..	4,974	28,744	2,989	1,018	59,671
Total, Forest Department.	117	60,834	30,441	33,948	1,084	50,874	1,86,406	67,115	82,823	5,13,642
Revenue Department—										
Timber ..	..	11,738	..	600	..	..	3,990	856	1,671	18,855
Firewood and charcoal.	..	3,170	..	767	..	..	965	6,470	1,526	12,898
Bamboos ..	..	77	..	..	..	..	..	..	..	77
Other minor produce.	..	3,229	..	1,230	..	..	16,502	13,364	7,571	41,896
Total, Revenue Department.	..	18,214	..	2,597	..	..	21,457	20,690	10,768	73,726
Total, (*b*) ..	117	79,048	30,441	36,545	1,084	50,874	2,07,863	87,805	93,591	5,87,368

(N) Relates to Nellore.

(D) Relates to Waltair Circle.

Summary of Revenue of the different districts, 1932-33—*cont.*

Budget heads.	Direction.	Ganjam.	Parlakimedi.	Vizagapatam.	Golgonda Agency.	Godavari Upper.	Godavari Lower.	Guntur.	Nellore.	Total.
WALTAIR CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
VIII. Forest Receipts —cont.										
(c) Drift and waif-wood and confiscated forest produce.	..	401	59	65	24	555	2,541	165	43	3,853
(e) Miscellaneous—										
Fines and forfeitures.	..	519	121	425	45	788	3,630	1,003	798	7,529
Rents of buildings.	(D) 95	1,864	185	379	50	1,615	2,097	366	911	7,562
Other sources ..	(D) & (E) 817	14,077	849	2,909	398	2,967	8,536	8,973	7,344	46,870
Total, (e) ..	912	16,460	1,155	3,713	493	5,370	14,463	10,342	9,053	61,961
Total ..	23,280	99,312	36,115	44,928	4,578	89,142	2,30,655	98,373	1,09,197	7,14,628
(h) *Deduct*—Refunds—Voted— Refunds by Forest Officers.	..	814	16	14	21	38	106	608	114	1,731
Grand total ..	2,328	98,498	36,099	44,914	4,557	89,104	2,30,549	97,765	1,09,083	7,12,897

(D) Relates to Waltair Circle.

(D) & (E) Out of Rs. 817 Rs. 310 relate to Godavari Lower division.

Summary of Revenue of the different districts, 1932-33—cont.

Budget heads	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
BELLARY CIRCLE,								
VIII. Forest Receipts.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(*a*) Timber and other produce removed from forests by Government Agency—								
Other produce—								
Timber	..	..	5,743	19,969	3,253	10	5,846	34,821
Firewood and charcoal	..	..	90	45	940	26	26	1,127
Bamboos	..	..	1,567	..	..	..	..	1,567
Total (*a*)	..	..	7,400	20,014	4,193	36	5,872	37,515
(*b*) Timber and other produce removed from the forests by consumers or purchasers—								
Forest Department—								
Timber	..	733	45	22,759	3,694	3,454	1,560	32,245
Firewood and charcoal	..	1,381	659	6,088	8,836	11,132	55,487	83,583
Bamboos	..	1,062	1,325	42,675	13,009	4,210	7,671	69,952
Grazing and fodder grass	..	20,975	31,195	17,097	33,592	37,267	16,803	1,56,929
Other minor produce	..	4,299	2,065	2,345	11,189	2,631	3,515	26,044
Total, Forest Department	..	28,450	35,289	90,964	70,320	58,694	85,036	3,68,753
Revenue Department—								
Timber	..	7,832	262	1,693	2,882	399	1,562	14,630
Firewood and charcoal	..	3,330	154	575	1,447	1,202	196	6,904
Other minor produce	..	1,25,309	4,251	5,166	44,856	8,382	5,296	1,93,260
Total, Revenue Department	..	1,36,471	4,667	7,434	49,185	9,983	7,054	2,14,794
Total (*b*)	..	1,64,921	39,956	98,398	1,19,505	68,677	92,090	5,83,547
(*c*) Drift and waifwood and confiscated forest produce	..	102	274	244	431	315	475	1,841

Summary of Revenue of the different districts, 1932-33—*cont.*

Budget heads.	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
BELLARY CIRCLE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
VIII. Forest Receipts—cont.								
(*c*) Miscellaneous—								
Fines and forfeitures		187	217	1,560	1,209	1,577	1,148	5,898
Rents of buildings		657	1,166	2,069	2,501	1,707	1,425	9,525
Other sources	210	9,889	3,131	5,528	10,948	11,472	7,906	49,083
Total (*c*)	210	10,733	4,514	9,157	14,658	14,756	10,478	64,506
Total	210	1,75,756	52,144	1,27,813	1,38,787	83,784	1,08,915	6,87,409
(*h*) *Deduct*—Refunds—Voted—								
Refunds by Forest officers		2,313	1,704	1,505	1,345	430	344	7,145
Grand Total	210	1,73,443	50,440	1,26,308	1,37,442	83,354	1,08,571	6,80,264

NOTE.—This return excludes the revenue of Rs. 237 realized in Salem Circle on account of sale of sandalwood, as it will be included in the return of Salem Circle (Rs. 216 of Anantapur division and Rs. 21 of Cuddapah South division).

Summary of Revenue of the different districts, 1932–33—*cont.*

Budget heads.	Direction.	Provincial Sylviculturist.	Working Plans Division.				Total.
			Palghat.	Lower Godavari.	North Coimbatore and Kollegal.	Tinnevelly.	
WORKING PLANS CIRCLE.							
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
VIII F Forest Receipts.							
(*a*) Timber and other produce removed from forests by Government Agency—							
Other produce—							
Timber	..	17	..	..	..	..	17
(*g*) Miscellaneous—							
Rents of buildings	478	176	..	27	..	4	685
Other sources	18	479	10	36	15	3	561
Total (*g*) ..	496	655	10	63	15	7	1,246
Total ..	496	672	10	63	15	7	1,263
(*h*) *Deduct*—Refunds—Voted—							
Refunds by Forest officers ..	..	..	..	17	..	..	17
Grand Total ..	496	672	10	46	15	7	1,246

Summary of Revenue of the different districts, 1932-33—*cont.*

Budget heads.	Direction.	East Vellore.	West Vellore.	Chittoor.	North Salem.	Central Salem.	South Salem.	Total.
SALEM CIRCLE.								
VIII. Forest Receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(*a*) Timber and other produce removed from forests by Government Agency—								
Sandalwood	7,994	80,617	20,313	244	1,40,532	37,749	9,587	2,97,036
Other produce—								
Timber	..	588	..	2,795	199	..	..	3,582
Firewood and charcoal	..	..	..	..	25	529	..	554
Bamboos	..	3	..	1	..	..	..	4
Other minor produce	..	305	..	3	221	3	9	541
Total	..	896	..	2,799	445	532	9	4,681
Total (*a*)	7,994	61,513	20,313	3,043	1,40,977	38,281	9,596	3,01,717
(*b*) Timber and other produce removed from the forests by consumers or purchasers—								
Forest Department—								
Timber	..	629	..	217	130	1,372	..	2,348
Firewood and charcoal	..	21,354	103	8,131	1,940	27,885	2,726	62,139
Bamboos	..	72,648	8,651	10,499	8,486	18,469	4,912	1,23,664
Grazing and fodder grass	..	38,749	2,996	22,945	30,469	58,997	22,049	1,76,205
Other minor produce	16	13,637	766	6,026	3,448	5,733	8,196	37,822
Total, Forest Department	16	1,47,017	12,516	47,818	44,472	1,12,456	37,883	4,02,178
Revenue Department—								
Timber	..	11,547	111	3,495	1,722	8,823	7,884	33,582
Firewood and charcoal	..	10,286	136	2,160	830	3,654	3,723	20,789
Bamboos	..	..	..	..	..	40	..	40
Other minor produce	..	22,408	747	9,346	8,180	15,841	16,975	73,497
Total, Revenue Department	..	44,241	994	15,001	10,732	28,358	28,582	1,27,908
Total (*b*)	16	1,91,258	13,510	62,819	55,204	1,40,814	66,465	5,30,086

Summary of Revenue of the different districts, 1932-33—*cont.*

Budget heads.	Direction.	East Vellore.	West Vellore.	Chittoor.	North Salem.	Central Salem.	South Salem.	Total.
SALEM CIRCLE—*cont.*								
VIII. Forest Receipts—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(c) Drift and waifwood and confiscated forest produce		136	59	133	51	156	135	670
(e) Miscellaneous—								
Fines and forfeitures		2,513	350	498	445	4,682	1,468	9,956
Rents of buildings		2,558	168	2,419	1,063	1,378	419	8,005
Other sources	389	20,006	1,471	7,869	5,697	19,227	12,993	67,652
Total (e)	389	25,077	1,989	10,786	7,205	25,287	14,880	85,613
Total	8,399	2,97,984	35,871	76,781	2,03,437	2,04,438	91,076	9,17,986
(k) *Deduct*—Refunds—Voted—								
Refunds by Forest officers		4,914	2,629	122	6	1,298	1,227	10,196
Grand Total	8,399	2,93,070	33,242	76,659	2,03,431	2,03,140	89,849	9,07,790

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Summary of Revenue of the different districts, 1932-33—*cont.*

Budget heads.	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
COIMBATORE CIRCLE.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs
VIII. Forest Receipts.								
(*a*) Timber and other produce removed from the forests by Government Agency—								
Sandalwood	12,600	7	1,94,000	..	9	..	..	(*a*) 2,06,616
Other produce—								
Timber	..	1,094	744	(*b*) 209,978	994	(*d*) 3,764	..	2,16,574
Firewood and charcoal	..	..	..	35	317	13	..	365
Bamboos	..	..	..	..	..	..	..	..
Other minor produce	..	94	246	538	..	..	..	878
(*b*) Timber and other produce removed from the forests by consumers or purchasers—								
Forest Department—								
Timber	..	315	526	64,837	1,323	885	..	67,886
Firewood and charcoal	..	630	22,634	13,881	60,208	28,066	1,457	1,26,876
Bamboos	..	7,453	25,637	3,337	2,619	1,668	..	40,714
Grazing and fodder grass	..	47,652	35,571	4,159	22,544	7,942	901	1,18,769
Other minor produce	..	2,479	(*c*) 8,834	6,294	38,315	9,816	1,943	67,681
Revenue Department—								
Timber	..	872	3,719	1,196	4,276	17	7	10,087
Firewood and charcoal	..	189	2,076	902	5,179	13,778	3,361	25,485
Bamboos	..	..	..	1	3	..	..	4
Other minor produce	..	661	2,022	1,963	9,177	14,732	2,564	31,119
(*c*) Drift and waifwood and confiscated forest produce	..	62	122	40	428	325	2	979

(*a*) The amount is distributed as follows :—

	Rs.
Kollegal	68,627
Madura	9
North Coimbatore	1,37,980
Total	2,06,616

(*b*) Excludes a sum of Rs. 588 realized in Vellore division, Salem Circle.
(*c*) Includes Rs 600 relating to the Nilgiri district.
(*d*) Excludes Rs. 4,817 credited in the Salem Circle
(*e*) Rupees 27-10-0 or Rs. 28 added with reference to the Accountant-General's March Final adjustment.

Summary of Revenue of the different districts, 1932-33—*cont.*

Budget heads.	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
COIMBATORE CIRCLE—*cont.*								
VIII. Forest Receipts—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(*c*) Miscellaneous—								
Fines and forfeitures	1	51	372	214	494	479	..	1,611
Rents of buildings	10	1,252	1,111	2,665	2,800	1,664	11	9,053
Other sources	17	5,415	17,167	5,553	22,876	9,827	4,343	66,198
Total	12,628	68,266	3,14,781	3,16,593	1,71,062	92,976	14,589	9,89,896
(*h*) *Deduct*—Refunds—Voted—								
Refunds by Forest officers	..	1,082	3,498	726	1,644	429	17	+ (*c*) 28 7,346
Net Total	12,628	67,234	3,11,283	3,14,867	1,69,418	92,547	14,572	9,82,577

Summary of Revenue of the different districts, 1932-33—*cont.*

Budget heads.	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
OOTACAMUND CIRCLE.		RS.	RS.	RS.	RS.	RS.	RS.	RS.
VIII. Forest Receipts.								
(*a*) Timber and other produce removed from forests by Government Agency—								
Sandalwood	..	780	18,431	..	10,473	..	..	29,684
Other produce—								
Timber	..	67,009	2,12,797	2,24,857	9,588	2,05,871	3,44,122	10,64,244
Firewood and charcoal	..	1,040	75	..	37,004	1,262	158	39,539
Bamboos	..	..	..	1	..	957	6,178	7,136
Other minor produce	..	..	2	156	802	..	36	996
Total	..	68,049	2,12,874	2,25,014	47,394	2,08,090	3,50,494	11,11,915
Total (*a*)	..	68,829	2,31,305	2,25,014	57,867	2,08,090	3,50,494	11,41,599
(*b*) Timber and other produce removed from the forests by consumers or purchasers—								
Forest Department—								
Timber	..	159	360	143	1,186	..	673	2,521
Firewood and charcoal	..	12,656	1,507	..	4,304	53,247	655	72,369
Bamboos	..	86	553	612	2,112	10,477	379	14,219
Grazing and fodder grass	..	5,825	8,265	3,739	6,314	4,023	..	28,166
Other minor produce	..	3,476	2,456	3,712	1,490	3,362	5,230	19,726
Total, Forest Department	..	22,202	13,141	8,206	15,406	71,109	6,937	1,37,001
Revenue Department—								
Timber	..	4,895	6,292	2,080	14	1,164	..	14,445
Firewood and charcoal	..	5,978	2,199	457	414	2,448	..	11,496
Bamboos	..	6	6	..	6	..	..	18
Other minor produce	..	995	894	518	87	3,904	..	6,398
Total, Revenue Department	..	11,874	9,391	3,055	521	7,516	..	32,357
Total (*b*)	..	34,076	22,532	11,261	15,927	78,625	6,937	1,69,358

Summary of Revenue of the different districts, 1932-33—*cont.*

Budget heads.	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total
OOTACAMUND CIRCLE—*cont.*								
VIII. Forest Receipts—cont.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(c) Drift and waifwood and confiscated forest produce.	..	540	302	337	23	55	1	1,258
(e) Miscellaneous—								
Fines and forfeitures	..	270	252	585	271	1,263	1,418	4,059
Forest College	..	..	..	..	..	..	..	..
Rents of buildings	814	2,075	1,382	3,881	1,372	1,850	2,234	13,108
Other sources	347	5,598	8,232	4,771	10,904	7,164	7,631	44,647
Total (e)	1,161	7,943	9,866	8,737	12,547	10,277	11,283	61,814
Total	1,161	1,11,388	2,64,005	2,45,349	86,364	2,97,047	3,68,715	(a)13,74,029
(d) *Deduct*—Refunds—Voted—								
Refunds by Forest officers	..	66	32	2,072	582	238	1,205	4,195
Grand total	1,161	1,11,322	2,63,973	2,43,277	85,782	2,96,809	3,67,510	13,69,834

(a) Excludes Rs. 181 realized from South Coimbatore.

Summary of Expenditure of the different districts for the year 1932-33.

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Ganjam.	Parlakimedi Maliahs.	Visagapatam.	Golgonda Agency.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore	Total.
WALTAIR CIRCLE.										
8. *b. Forest Conservancy, Maintenance and Regeneration.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs	Rs.
A. Forest produce removed by Government agency—Voted—										
Timber	(a) 604	26	1,004	1,938	1,930	7,367	12	14	..	12,895
Firewood and charcoal	..	..	236	..	..	181	..	11	..	428
Bamboos	..	..	..	..	..	..	..	..	..	..
Sandalwood	..	..	..	..	..	..	..	..	..	..
Grass and other minor produce.	..	..	65	..	..	..	88	..	6,582	6,735
B. Timber and other produce removed from the forest by consumers and purchasers	..	7,556	1,810	2,970	589	6,660	9,939	8,947	5,395	43,866
C. 1. Feed and upkeep of cattle	..	..	..	..	..	754	204	..	47	1,005
2. Renewals or replacements of stores, tools and plant	..	180	12	128	..	821	6,470	686	2,012	10,309
D. 1. Roads and bridges	..	2,304	..	1,109	..	639	1,960	914	768	7,694
2. Buildings—										
Non-voted—										
Rates and taxes	..	191	..	79	..	..	184	173	16	643
Voted—										
Buildings	..	6,513	122	953	200	3,013	2,385	709	1,065	14,960
Forest College	..	..	..	..	..	..	..	..	..	..
Other works	..	258	..	18	..	52	110	46	109	593
E. 1. Regeneration	262	..	131	517	266	3,854	991	237	146	6,404
2. Fire protection	..	4,048	388	228	69	4,299	1,276	..	245	10,553
3. Other works—										
Voted—										
Maintenance of boundaries.	..	1,314	..	42	383	209	1,508	166	..	3,612
Forest surveys	..	..	..	..	..	..	..	..	..	..
Other items	..	4,216	..	481	10	..	142	329	113	5,291

(a) Relates to Lower Godavari division.

Summary of Expenditure of the different districts for the year 1932–33—cont.

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Ganjam.	Parlakimedi Maliahs.	Vizagapatam.	Golgonda Agency.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total.
WALTAIR CIRCLE—*cont.*										
8. *b. Forest Conservancy, Maintenance and Regeneration*—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
F. Other charges—										
Non-voted—										
Rates and taxes	..	..	..	3	..	..	25	..	..	28
Voted—										
Honoraria	..	..	..	..	..	..	..	25	25	50
Supplies and services	..	10	..	8	..	76	..	..	..	94
Miscellaneous	..	890	..	527	..	16	5,664	6	..	6,908
H. Suspense—Works Advances	..	..	..	..	..	..	..	..	..	..
Total	866	27,306	3,768	9,001	3,447	27,941	30,958	12,253	16,523	1,32,063
Total, Non-Voted	..	191	..	82	..	..	209	173	16	671
Total, Voted	866	27,115	3,768	8,919	3,447	27,941	30,749	12,080	16,507	1,31,392
8. *c. a. Establishments.*										
A. 1. Pay of officers—										
Non-voted	30,207	13,428	..	3,950	..	9,835	24,776	1,875	11,400	95,471
Emergency cut	— 2,693	— 1,823	..	— 395	..	— 644	— 2,455	— 188	— 1,620	— 9,818
Pay of officers—Voted	..	5,977	8,450	7,139	..	..	6,133	9,177	..	36,876
Emergency cut	..	— 598	— 845	— 534	..	..	— 614	— 918	..	— 3,509
A. 2. Pay of establishments—Voted—										
Permanent	9,987	50,236	16,214	20,651	2,661	42,420	43,395	34,815	26,205	2,46,584
Temporary	17	2,016	1,066	888	756	2,493	1,187	..	..	8,423
Emergency Cut	— 745	— 2,431	— 853	— 890	— 113	— 1,900	— 2,006	— 1,258	— 1,305	— 11,501
A. 3. Allowances—Non-voted—										
Travelling allowances	2,863	2,099	..	1,078	..	2,388	3,592	469	1,738	14,227
Allowances—Voted—										
Travelling allowances	951	6,983	3,396	2,673	349	5,483	4,823	3,795	3,249	29,702
Fixed travelling allowances	..	2,051	614	969	131	2,163	1,682	1,524	926	10,060
Other compensatory	..	999	259	345	61	967	566	460	637	4,284

Summary of Expenditure of the different districts for the year 1932–33—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Ganjam.	Parlakimedi Maliahs.	Vizagapatam.	Golgonda Agency.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total.
WALTAIR CIRCLE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. *c. a. Establishments*—cont.										
A. 4. Contingencies and Supplies and Services—										
Non-Voted—										
Rates and taxes	1,488	138	..	194	27	..	298	522	266	2,923
Voted—										
Rents of Public Works Department buildings.	2,186	2,131	1,932	1,616	324	266	1,920	3,628	958	14,961
Deduct recoveries of rents of Public Works Department buildings ..	— 1,306	— 1,112	— 760	— 599	..	— 144	— 62	— 780	..	— 4,763
Apparatus and materials ..	26	281	92	100	..	227	211	35	106	1,078
Service postage and telegram charges	1,201	1,597	200	636	60	1,101	1,232	901	802	7,730
Tour charges	556	839	513	424	93	346	734	404	498	4,407
Office expenses	552	410	818	187	8	811	645	310	307	4,048
Miscellaneous	13	390	63	125	92	166	14	87	129	1,079
Total, c. A. District establishments ..	45,303	83,611	31,159	38,557	4,449	63,978	86,071	54,848	44,286	4,52,262
Total, Non-Voted ..	31,865	13,942	..	4,827	27	11,579	26,211	2,678	11,774	1,02,803
Total, Voted ..	13,438	69,769	31,159	33,730	4,422	52,399	59,860	52,170	32,512	3,49,459
(*d*) Losses on Government commercial undertakings R.S. Mills	..	1,92,763	..	..	..	..	..	..	..	1,92,763

Summary of Expenditure of the different districts for the year 1932-33—cont.

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Ganjam.	Parlakimedi Maliahs.	Vizagapatam.	Golgonda Agency.	Godavari, Upper.	Godavari, Lower.	Guntur.	Nellore.	Total.
WALTAIR CIRCLE—*cont.*										
52—*A. Capital Outlay on Forests.*		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A. a. Forest surveys	..	..	..	..	..	..	..	..	..	..
b. Organization, improvements and extension of Forests—										
A. Demarcation—Voted—										
Demarcation	..	1,733	..	..	12	61	21	..	..	1,827
Cost of forest settlement and compensation for land and rights	..	..	..	..	..	..	..	..	..	..
B. Sowing and planting	..	..	..	..	..	..	1,759	134	2,004	3,897
C. Other charges—Voted—										
Working p'ans	..	..	..	..	..	..	..	..	..	..
Other miscellaneous charges	..	..	..	..	..	..	..	..	..	..
c. Communications and buildings—										
A. Roads and bridges—										
Works in progress	..	1,246	..	..	..	342	309	..	..	1,897
New works	..	..	..	..	..	400	..	50	379	829
B. Buildings—										
Works in progress	..	2,829	..	..	..	..	..	..	..	2,829
New works	..	53	..	..	..	..	500	..	1,024	1,577
C. Other works—										
Works in progress	..	..	..	..	..	..	..	..	..	..
New works	..	..	..	..	..	..	94	..	..	94
d. Railways and Tramways	..	..	..	..	..	..	..	..	425	425
Livestock, stores, tools and plant—										
e. A. Livestock—Purchase of livestock	..	..	..	..	..	..	..	..	..	..
B. Stores, tools and plant	..	..	..	70	..	..	30	..	..	100
g. Investment in Government commercial undertakings	..	— 3,41,926	..	..	..	..	..	..	..	— 3,41,926
Write back of capital expenditure to revenue	..	1,49,163	..	..	..	..	..	..	..	1,49,163
Total	..	— 1,86,992	..	70	12	803	2,713	184	3,832	— 1,79,288

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
	Rs	Rs	Rs	Rs	Rs.	Rs.	Rs.	Rs
BELLARY CIRCLE.								
8. *b. Forest Conservancy, Maintenance and Regeneration.*								
b. A. Forest produce removed by Government agency—Voted—								
Timber	..	..	1,966	3,112	1,231	..	1,042	7,351
Firewood and charcoal	..	..	60	..	86	..	..	146
Bamboos	..	..	864	..	..	..	..	864
Sandalwood	..	39	..	..	..	..	6	45
Total, b. A. (Voted)	..	39	2,890	3,112	1,317	..	1,048	8,406
b. B. Timber and other produce removed from the forests by consumers and purchasers.	..	4,918	4,659	5,695	5,783	8,736	10,116	39,907
b. C. 1. Feed and upkeep of cattle	..	20	..	..	1,746	..	..	1,766
2. Renewals or replacement of stores, tools and plant—								
Renewals and replacement of stores, tools and plant	..	55	123	181	77	96	76	608
Total, C	..	75	123	181	1,823	96	76	2,374
b D. 1. Roads and bridges	..	360	968	2,907	1,243	554	2,682	8,714
2. Buildings and other works—								
Non-voted—								
Rates and taxes	..	109	21	250	245	250	82	957
Buildings	..	2,013	1,364	1,619	1,649	1,763	1,794	10,202
Other works	..	7	46	9	..	35	..	97
Total, D	..	2,489	2,399	4,785	3,137	2,602	4,558	19,970

Summary of Expenditure of the different districts for the year 1932-33—cont.

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
BELLARY CIRCLE—*cont.*								
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. b. *Forest Conservancy, Maintenance and Regeneration*—cont.								
b. E 1. Regeneration	79	168	297	362	1,054	550	331	2,841
2. Fire protection	..	51	554	659	1,255	363	350	3,732
3. Other works—								
Voted—								
Maintenance of boundaries	..	169	144	177	50	59	25	624
Forest surveys	..	..	595	..	..	..	..	595
Emergency out	..	..	— 55	..	..	..	— ..	— 55
Other items	..	92	94	..	43	46	221	496
Total, E	79	480	1,629	1,198	2,402	1,018	1,427	8,233
b. F. Other charges—								
Non-voted—								
Rates and taxes	..	..	..	..	..	..	..	..
Voted—								
Honoraria	..	..	..	46	38	75	106	265
Supplies and services	..	..	179	..	..	225	..	404
Miscellaneous	..	..	31	86	110	56	50	333
Total, F	..	..	210	132	148	356	156	1,002
b H. Suspense—Works Advances—								
Voted	..	..	..	..	..	..	..	..
Total	79	8,001	11,910	15,103	14,610	12,808	17,381	79,892
Non-voted	..	109	21	250	245	250	82	957
Voted	79	7,892	11,889	14,853	14,365	12,558	17,299	78,935
Total	79	8,001	11,910	15,103	14,610	12,808	17,381	79,892

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Cuddapah, North.	Cuddapah, South.	Total.
BELLARY CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
c. A. *District Establishments.*								
c. A. 1. Pay of officers—Non-voted	25,236	9,788	18,366	10,206	..	8,740	5,456	77,792
Emergency cut	— 2,752	— 979	— 1,837	— 1,021	..	— 874	— 532	— 7,995
Pay of officers—Voted	..	784	475	3,459	13,482	4,500	7,219	29,919
Emergency cut	..	..	— 47	— 346	— 1,348	— 450	— 547	— 2,738
Net Total	22,484	9,593	16,967	12,298	12,134	11,916	11,596	96,978
c. A. 2. Pay of establishments—Voted—								
Permanent	9,844	28,673	34,891	35,560	46,622	36,777	40,706	2,33,073
Emergency cut	— 829	— 1,314	— 1,660	— 1,492	— 2,338	— 1,541	— 1,820	— 10,994
Temporary	..	168	852	420	1,514	948	288	4,190
Total of c. A. 2	9,015	27,527	34,083	34,488	45,798	36,184	39,174	2,26,269
c. A. 3. Allowances—Non-voted—								
Travelling allowances	1,279	1,899	2,402	1,171	..	1,829	753	8,883
Allowances—Voted—								
Travelling allowance	453	2,064	2,647	4,117	5,679	4,159	3,153	22,272
Fixed travelling allowance	..	827	1,564	2,143	2,112	1,584	1,800	10,030
Other compensatory	..	558	1,064	499	858	671	1,102	4,752
Total, Allowances—Voted	453	3,449	5,275	6,759	8,649	6,414	6,055	37,054

Summary of Expenditure of the different districts for the year 1932–33—*cont.*

Account heads (major; minor and sub-heads and units of appropriation).	Direction.	Anantapur.	Kurnool, East.	Kurnool, South.	Kurnool, West	Cuddapah, North.	Cuddapah, South.	Total.
BELLARY CIRCLE—*cont.*								
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
c. A. *District Establishments*—cont.								
c. A. 4. Contingencies and Supplies and Services—								
Rates and taxes—Non-voted	978	197	..	127	55	167	560	2,084
Voted—								
Rents of Public Works Department buildings.	3,534	1,791	..	852	1,044	672	1,943	9,836
Apparatus and materials	..	29	183	148	206	150	146	862
Service postage and telegram charges	627	970	861	1,009	797	999	1,030	6,293
Tour charges	481	532	898	820	312	778	521	4,342
Office expenses	314	435	850	540	734	617	478	3,968
Miscellaneous	133	256	640	150	333	234	205	1,951
Deduct—Recoveries of rent on Public Works Department buildings.	— 1,212	— 576	..	..	..	— 11	— 684	— 2,483
Total, c. A. 4	4,855	3,634	3,432	3,646	3,481	3,606	4,199	26,853
Total, c. A. District Establishments	38,086	46,102	62,149	58,362	70,062	59,449	61,777	(A) 3,95,987
Non-voted	27,493	11,884	20,768	11,504	55	10,236	6,769	88,709
Voted	10,593	34,218	41,381	46,858	70,007	49,213	55,008	3,07,278
52-*A. Capital Outlay on Forests.*								
(*c*) Communications and buildings—								
A. Roads and bridges—								
Works in progress	..	..	455	..	..	..	400	855
B. Buildings—								
New works	..	..	231	..	380	1,237	..	1,848
C. Other works—								
New works	..	..	147	200	..	..	..	347
Total, 52-A. (*c*)	..	..	833	200	380	1,237	400	3,050
(*d*) A. Live-stock—Purchase of live-stock—								
B. Stores, tools and plant	..	50	..	30	24	..	..	(B) 104
Total, (*d*)	..	50	..	30	24	..	..	104
Total	..	50	833	230	404	1,237	400	3,154

(A) Rs. 112 to be added with reference to the Accountant-General's figures.
(B) Rs. 32 to be deducted with reference to the Accountant-General's figures.

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Working Plans Division.									
	Direction.	Mount Stuart.	Mangalore.	Lower Godavari.	North Coimbatore.	Wynaad.	Palghat.	Tinnevelly.	Provincial Sylvicultu-rist.	Total.
WORKING PLANS CIRCLE.									RS.	RS.
8. *b. Forest Conservancy, Maintenance and Regeneration.*										
b. C. 2. Renewals and replacements of stores, tools and plant—Voted—										
Renewals, tools and plant	..								262	262
Total ..	..	..	..	..	..	..	..	..	262	262
D. 2. Buildings and other works—										
Voted—										
Buildings	..	..	..	..	..	..	..	..	98	98
Total ..	..	..	..	..	..	..	..	..	98	98
Voted ..	..	..	..	..	..	..	..	..	360	360
Total ..	..	..	..	..	..	..	..	..	360	360
8. *c. Establishments.*										
C B Research—										
C. B. 1. Pay of officers—Non-voted—	..	..	..	..	..	..	..	..	15,045	15,045
Emergency cut on pay	..	..	..	..	..	..	..	..	—1,924	—1,924
Total ..	..	..	..	..	..	..	..	..	..	..
C. B. 1. Pay of establishments—Voted—										
Permanent									10,976	10,976
Deduct—Emergency cut on pay									863	863
Temporary									24	24
C. B. 2. Supplies and Services—										
Petty Supplies—Voted									6,503	6,503

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Working Plans Division.								Total.
		Mount Stuart.	Mangalore.	Lower Godavari.	North Coimbatore.	Wynad.	Palghat.	Tinnevelly.	Provincial Sylviculturist.	
WORKING PLANS CIRCLE—*cont.*									Rs.	Rs.
8. *c. Establishments*—cont.										
C. B. 3. Non-voted—Travelling Allowance ..	..	..	..	..	..	..	..	..	3,520	3,520
Voted Travelling Allowance ..	..	..	..	..	..	..	..	..	3,545	3,545
Non-contract contingencies—Non-voted—										
Rates and taxes	..	..	..	..	..	..	..	..	94	94
Contingencies—Voted	..	..	..	..	..	..	..	..	1,036	1,036
Total ..	..	..	..	..	..	..	..	.. A	37,892	37,892
Non-voted ..	..	..	..	..	..	..	..	..	16,675	16,675
Voted ..	..	..	..	..	..	..	..	..	21,217	21,217

A. *Add* Rs. 19,659 spent on the investigation of spike in North Salem division.

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	Working Plans Division.							Total.
		Palghat.	Lower Godavari.	North Coimbatore and Kollegal.	Wynaad.	Tinnevelly.	South Coimbatore.	Madura.	
WORKING PLANS CIRCLE—*cont.*									
52-A. Capital Outlay on Forests.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
b. C. Other charges—Voted—									
Working plans	101	52	1,293	7,065	..	1,873	3,207	64	13,655
c. B. Stores, tools and plant	170	..	..	..	..	..	..	..	170
Total ..	271	52	1,293	7,065	..	1,873	3,207	64	13,825
Voted ..	271	52	1,293	7,065	..	1,873	3,207	64	13,825
52-A. f. CAPITAL OUTLAY ON FORESTS—ESTABLISHMENT—WORKING PLANS CIRCLE.									
Pay of officers—Non-voted	29,271	..	16,467	12,624	720	8,345	5,271	..	72,698
Deduct—Emergency cut on pay	3,189	..	2,127	1,262	..	835	527	..	— 7,940
Pay of officers—Voted	..	5,812	2,862	6,545	..	7,750	..	2,002	24,971
Deduct—Emergency cut on pay	..	581	286	655	..	775	..	200	— 2,497
Pay of establishments—Voted—Permanent	6,457	4,156	12,416	18,119	302	11,251	5,245	1,615	59,561
Deduct—Emergency cut on pay	438	211	857	856	..	702	300	83	3,447
Allowances—Non-voted—									
Travelling—(including cost of passages)..	5,366	..	2,798	1,766	..	1,371	1,014	..	12,315
Allowances—Voted—									
1. Travelling allowance	1,310	837	3,599	5,735	..	2,669	1,411	763	16,324
2. Fixed travelling allowance	..	335	1,017	2,804	..	653	694	82	5,585
3. Other compensatory	1,262	47	141	1,221	52	251	19	16	3,009
Contingencies—Voted	3,419	152	849	555	21	553	251	147	5,947
Supplies and Services—Voted	1,035	..	..	24	..	99	32	..	1,190
Total ..	44,493	10,547	36,879	46,620	1,095	30,630	13,110	4,342	1,87,716+64-A
Non-voted ..	31,448	..	17,138	13,128	720	8,881	5,758	..	77,073
Voted ..	13,045	10,547	19,741	33,492	375	21,719	7,352	4,342	1,10,643+64-A
Grand Total ..	44,764	10,599	38,172	53,685	1,095	32,503	16,317	4,406	2,01,541 +64-A

A. Added with reference to the Accountant-General's actuals.

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	East Vellore	West Vellore.	Chittoor.	North Salem.	Central Salem.	South Salem.	Total.
SALEM CIRCLE.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. *b. Forest Conservancy, Maintenance and Regeneration.*								
b. A. Forest produce removed by Government Agency—								
Timber	..	380	..	458	28	..	..	866
Firewood	..	..	..	..	..	..	..	..
Sandalwood	..	7,108	1,483	155	21,456	6,897	1,712	38,811
Grass and other minor produce ..	..	..	..	..	..	..	..	..
Total ..	..	7,488	1,483	613	21,484	6,897	1,712	39,677
b. B. Timber and other produce removed from forests by consumers and purchasers.	..	10,127	1,671	9,460	5,038	9,412	5,435	41,143
b. C. 1. Feed and up-keep of cattle	..	..	..	52	..	..	..	52
2. Renewals and replacements of stores, tools, etc.	..	84	14	98	90	80	80	446
Total ..	..	84	14	150	90	80	80	498
b. D. 1. Roads and bridges	..	2,774	471	3,476	3,360	1,494	970	12,545
2. Buildings and other works—								
Rates and taxes—Non-voted ..	..	644	3	297	46	108	97	1,195
Buildings—Voted	..	3,298	429	3,189	1,531	3,037	2,275	13,754
Other works	..	47	53	375	35	35	..	545
Total ..	..	6,758	956	7,337	4,972	4,674	3,342	28,039
b. E. 1. Regeneration	..	354	234	2,563	548	879	857	5,435
2. Fire protection	..	768	738	408	562	1,310	1,064	4,850
3. Other charges—Maintenance of boundaries.	..	..	..	97	50	147	..	294
Total ..	..	1,122	972	3,068	1,160	2,336	1,921	10,579

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	East Vellore.	West Vellore.	Chittoor.	North Salem.	Central Salem.	South Salem.	Total.
SALEM CIRCLE—*cont.*	RS	RS.	RS.	RS.	RS.	RS.	RS.	RS.
8 *b. Forest Conservancy, Maintenance and Regeneration*—cont.								
b. F. Other charges—Voted—								
Honoraria	..	30	..	98	..	300	92	520
Supplies and Services	..	..	..	..	3,094	13	40	3,147
Miscellaneous	..	2	..	10	72	80	15	179
Total ..	..	32	..	108	3,166	393	147	3,846
b. H. Suspense work and advances	..	..	..	..	..	..	..	..
Grand total ..	..	25,611	5,096	20,736	35,910	23,792	12,637	1,23,782
Non-voted ..	..	644	3	297	46	108	97	1,195
Voted ..	..	24,967	5,093	20,439	35,864	23,684	12,540	1,22,587
8. *c. A. Establishments.*								
A-1. Pay of officers—Non-voted	25,349	13,023	3,837	15,986	16,182	8,757	14,534	97,668
Deduct Emergency cut	— 2,794	— 1,449	— 384	— 1,987	— 1,618	— 901	— 1,453	— 10,586
Pay of officers—Voted	..	15,307	2,075	..	8,424	..	1,400	27,206
Deduct Emergency cut	..	— 1,531	— 207	..	— 842	..	— 140	— 2,720
Total ..	22,555	25,350	5,321	13,999	22,146	7,856	14,341	1,11,568
A-2. Pay of establishments—Voted—								
Permanent	11,028	51,844	7,170	39,593	41,120	42,084	30,730	2,23,569
Temporary	22	1,958	352	1,019	2,972	884	1,464	8,671
Deduct—Emergency cut	— 861	— 2,121	— 262	— 1,828	— 1,970	— 1,539	— 1,219	— 9,800
Total ..	10,189	51,681	7,260	38,784	42,122	41,429	30,975	2,22,440

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	East Vellore.	West Vellore.	Chittoor.	North Salem.	Central Salem.	South Salem.	Total
SALEM CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS	RS	RS.	RS
8. *c. A. Establishments*—cont.								
A.3. Allowances—Non-voted—								
Travelling allowance	1,146	1,642	391	1,833	1,695	1,920	1,600	10,227
Other compensatory	..	..	..	..	..	..	..	..
Cost of passages granted under Superior Civil Service Rules ..	1,978	..	..	..	..	..	..	1,978
Total ..	3,124	1,642	391	1,833	1,695	1,920	1,600	12,205
Allowances—Voted—								
Travelling allowance	594	4,164	584	2,765	5,523	2,987	2,493	19,110
Fixed travelling allowance	..	2,232	281	1,692	1,946	1,473	1,508	9,132
Other compensatory	..	653	16	631	924	668	358	3,250
Total ..	594	7,049	881	5,088	8,393	5,128	4,359	31,492
A. 4. Contingencies, supplies and services—								
Rents—Rates and taxes—Non-voted.	504	305	12	28	..	733	447	2,029
Voted—Rents of Public Works Department buildings	7,194	3,203	217	300	1,634	1,782	1,328	15,658
Deduct recoveries on account of Public Works Department buildings ..	— 2,503	— 396	— 132	..	— 912	— 791	— 903	— 5,637
Apparatus and materials	1	138	..	134	158	162	137	730
Service postage and telegram charges.	600	1,434	201	862	1,159	910	673	5,839
Tour charges.	314	431	80	365	689	372	743	2,994
Office expenses	561	491	22	197	499	905	303	2,978
Miscellaneous	158	267	208	179	186	342	278	1,618
Total ..	6,829	5,873	608	2,065	3,413	4,415	3,006	26,209
Grand Total ..	43,291	91,595	14,461	61,769	77,769	60,748	54,281	4,03,914*
Non-voted ..	26,183	13,521	3,856	15,860	16,259	10,509	15,128	1,01,316
Voted ..	17,108	78,074	10,605	45,909	61,510	50,239	39,153	3,02,598

A. Rupees 29 to be added with reference to the Accountant-General's figures.

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Account heads (major, minor and sub-heads and units of appropriation).	Direction.	East Vellore.	West Vellore.	Chittoor.	North Salem.	Central Salem.	South Salem.	Total.
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
SALEM CIRCLE—*cont.*								
8. *c. ii*—*Research.*								
Charges payable to Governments, Departments and others	..	..	..	..	A 19,659	..	..	A 19,659
62-A. (b) Conservancy and works—								
(*a*) Forest surveys	..	..	..	..	..	..	..	..
(*b*) Organisation, improvement and extension of forests—								
Demarcation	..	..	..	96	159	155	..	410
(c) Communications and buildings—								
Buildings—								
Works in progress	..	..	1,800	..	..	..	..	1,800
New works	..	..	..	..	..	..	..	..
Other works—								
Works in progress	..	..	214	..	..	..	..	214
New works	..	..	40	..	53	..	76	169
Total ..	..	..	2,054	..	53	..	76	2,183
Grand total ..	..	..	2,054	96	212	155	76	2,593

A. Included by the Provincial Sylviculturist in his accounts.

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Budget heads.	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore	Total.
COIMBATORE CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS	RS	RS.
8. *b. Conservancy, Maintenance and Regeneration.*								
A. Forest produce removed by Government agency—Voted—								
Timber	..	891	167	77,229	363	..	..	78,650
Firewood and charcoal	..	6	..	..	191	..	..	197
Bamboos	..	..	..	..	..	..	..	..
Sandalwood	256	5,170	11,515	..	..	847	..	17,788
Grass and other minor produce	..	191	446	40	..	..	..	677
B. Timber and other produce removed from the forest by consumers and purchasers.	..	6,504	9,462	2,911	11,935	6,488	251	37,551
C. 1. Feed and keep of cattle	..	..	..	16,668	..	..	..	16,668
2. Renewals or replacements of stores, tools and plant—								
Voted—Renewals and replacements of stores, tools and plant.	45	34	79	499	54	1,160	35	1,906
D. 1. Roads and bridges	..	3,050	7,577	10,778	8,295	4,054	..	33,754
2. Buildings—Non-voted—								
Rates and taxes	..	38	37	90	240	85	..	490
Voted—Buildings	..	1,140	1,495	3,175	2,178	2,282	125	10,390
Other works	..	63	17	1,009	41	29	..	1,159
E. 1. Regeneration	..	71	564	7,904	720	981	..	10,240
2. Fire protection	..	553	541	1,913	2,754	413	..	6,174
3. Other charges—								
Maintenance of boundaries	..	..	67	827	141	81	25	1,141
Other items	..	142	1,722	757	103	228	..	2,952
F. Other charges—Non-voted—								
Rates and taxes	..	45	11	12	167	..	..	235
G. Honoraria—Voted	..	..	118	60	30	..	..	203
Supplies and services	..	..	5	1	..	37	..	43
Miscellaneous	..	..	78	5,057	..	19	..	5,154
H. Suspense Works Advances	..	1	25	— 269	..	..	..	— 243
Total	301	17,899	33,921	1,28,661	27,207	16,704	436	2,25,129

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Budget heads.	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
COIMBATORE CIRCLE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. *C. A. District Establishments.*								
C.A. 1. Pay of officers—Non-voted	25,800	9,800	24,293	14,434	5,800	7,066	..	87,193
Emergency deductions from pay ..	— 2,580	— 980	— 2,829	— 1,924	— 580	— 706	..	— 9,599
Pay of officers—Voted	650	..	3,233	11,125	17,138	481	..	32,627
Emergency deduction from pay ..	— 65	..	— 323	— 1,114	— 1,683	— 22	..	— 3,207
C.A. 2. Pay of establishments—Voted—								
Permanent	9,099	35,789	39,651	38,990	48,370	38,713	1,384	2,11,996
Temporary	14	309	780	2,303	525	574	..	4,505
Emergency deduction from pay ..	— 696	— 1,510	— 1,849	— 2,442	— 1,780	— 1,787	..	— 10,064
C.A. 3. Allowances—								
Non-voted—								
Travelling allowances	2,732	1,730	4,145	2,334	1,403	1,400	..	13,744
Cost of passages	..	..	..	..	..	..	..	..
Voted—								
Travelling allowances	881	3,040 (*a*) + 8	4,657	4,147	6,580	2,910	56	22,271 (*a*) + 8
Fixed travelling allowance	..	1,772	2,712	1,933	2,018	1,039	105	9,579
Other compensatory	..	371	513	795	1,599	475	..	3,753
C.A 4. Contingencies and supplies and services—								
Non-voted—								
Rates and taxes	575	51	1,013	466	154	354	..	2,613
Voted—								
Rents on Public Works Department buildings	1,164	1,978	2,508	2,016	817	1,426	..	9,909
Deduct recoveries on account of Public Works Department buildings	..	— 660	— 890	— 950	..	— 630	..	— 3,130
Apparatus and materials	32	44	77	667	106	76	..	1,002
Service postage and telegram charges.	609	544	698	1,062	1,248	899	100	5,160
Tour charges	308	421	831	310	460	586	..	2,916
Office expenses	508	743	502	1,039	1,113	296	..	4,201
Miscellaneous	110	118	394	30	26	250	..	928
Total ..	39,141	53,560 (*a*) + 8	80,116	75,221	83,314	53,400	1,645	3,86,397 (*a*) + 8

(*a*) Included being the double adjustment in Kollegal division.

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Budget heads.	Direction.	Kollegal.	Coimbatore, North.	Coimbatore, South.	Madura.	Tinnevelly.	Tanjore.	Total.
COIMBATORE CIRCLE—*cont.*								
		Rs.	Rs.	Rs.	Rs.	Rs.		Rs.
52-A. Capital Outlay on Forests.								
b. Organization, improvements and extension of forests—								
A. Demarcation	..	196	..	..	8	..	..	284
B. Sowing and planting	..	..	..	..	..	914	..	914
C. Other charges—								
Other miscellaneous charges	..	..	..	..	596	..	..	596
c. C. Communications and buildings—								
A. Roads and bridges—								
Works in progress	..	..	..	..	531	..	..	531
New works	..	..	64	1,391	..	..	..	1,455
B. Buildings—								
Works in progress	..	..	..	710	..	..	..	710
New works	..	..	..	500	..	607	..	1,107
C. Other works—								
Works in progress	..	..	..	..	..	..	..	..
New works	..	..	..	986	..	44	..	1,030
e. Livestock, stores, tools and plant—								
A. Purchase of livestock	..	..	..	— 1,323	..	..	..	— 1,323
B. Purchase of stores, tools and plant	..	..	..	87	23	74	..	184
Improvements on Government Commercial undertakings—								
Mount Stuart Forests	..	..	..	— 37,297	..	..	..	— 37,297
Deduct receipts and recoveries of Capital expenditure write back of capital expenditure to revenue	..	..	..	— 4,384	..	..	..	— 4,384
Total	..	196	64	— 39,330	1,238	1,639	..	— 36,193

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Budget heads.	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
OOTACAMUND CIRCLE.								
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. *b. Conservancy, Maintenance and Regeneration.*								
A. Forest produce removed by Government Agency—Voted—								
Timber	..	17,544	61,075	54,411	809	79,865	37,487	2,51,191
Firewood and charcoal	..	..	14	..	11,421	4	..	11,439
Bamboos	..	..	..	..	..	428	4,532	4,960
Sandalwood	..	430	2,221	..	1,000	..	..	3,651
Grass and other minor produce ..	..	..	..	..	293	..	..	293
Total, A ..	..	17,974	63,310	54,411	13,523	80,297	42,019	2,71,534
B. Timber and other produce removed from forests by consumers and purchasers	..	1,287	1,386	2,107	632	5,884	1,722	13,018
C. (1) Feed and keep of cattle	227	1,368	10,182	27,793	3,797	24	19,192	62,583
(2) Renewals and replacement of stores, tools and plant	..	230	665	1,850	235	48	1,100	4,128
D. (1) Roads and bridges	..	215	503	19,970	1,685	3,756	1,840	27,969
D. (2) Buildings and other works—								
Non-voted—								
Rates and taxes	..	..	165	..	660	83	..	908
Buildings	214	850	518	2,317	1,839	1,735	2,278	9,751
Forest College	..	..	..	..	..	..	..	..
Other works	..	24	77	647	30	143	31	952
Total, D (2) ..	214	874	760	2,964	2,529	1,961	2,309	11,611
E. (1) Regeneration	..	1,963	3,114	9,320	3,813	5,108	13,728	37,046
(2) Fire protection	..	2,139	2,476	1,355	2,546	1,979	3,359	13,854

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Budget heads.	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
OOTACAMUND CIRCLE—*cont.*								
8. *b. Conservancy, Maintenance and Regeneration*—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
E. (3) Other works—								
Maintenance of boundaries ..	..	153	316	426	803	103	..	1,801
Forest surveys	..	1	..	..	..	..	..	1
Other items	..	77	23	..	287	334	9	730
Total, E. (3) ..	..	231	339	426	1,090	437	9	2,532
F. Other charges—Non-voted—								
Rates and taxes	..	..	..	51	1,396	59	56	1,562
Grants-in-aid—Nilgiris Games Association	..	..	..	..	3,830	..	..	3,830
Honoraria	..	10	40	..	100	..	..	150
Supplies and Services	..	282	232	1,319	..	45	2	1,880
Miscellaneous	..	20	10	83	..	7	6,716	6,836
Total, F ..	..	312	282	1,453	5,326	111	6,774	14,258
ix. Suspense—Works Advances—Voted ..	..	..	..	360	..	— 893	— 494	— 1,027
Total ..	441	26,598	88,017	1,22,009	85,176	98,712	91,558	4,57,506*
Non-voted ..	..	..	165	51	2,056	142	56	2,470
Voted ..	441	26,598	82,852	1,21,958	33,120	98,570	91,502	4,55,036
8 *c. Establishments.*								
A. (1) Pay of Officers—								
Non-voted	26,650	11,282	7,308	12,850	7,850	3,955	12,600	82,495
Deduct emergency cut	— 2,878	— 1,269	— 874	— 1,765	— 1,112	— 896	— 1,733	— 10,027
Voted	4,499	5,089	7,680	25,487	1,800	16,653	6,257	67,465
Deduct emergency cut	— 450	— 508	— 768	— 2,549	— 180	— 1,665	— 626	— 6,746
Total, A (1) ..	27,821	14,594	13,346	34,023	8,358	18,547	16,498	1,33,187
A. (2) Pay of Establishments—Voted—								
Permanent	11,452	35,672	31,377	50,489	38,100	31,579	33,121	2,31,790
Temporary	31	540	1,229	2,106	285	1,449	3,758	9,398
Deduct emergency cut	— 837	— 1,382	— 1,255	— 3,107	— 1,650	— 1,533	— 1,763	— 11,527
Total, A (2) ..	10,646	34,813	31,351	49,488	36,735	31,495	35,116	2,29,661

* The Accountant-General's figures are Rs. 4,57,507.

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Budget heads.	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
OOTACAMUND CIRCLE—*cont.*								
8. *c. Establishments*—cont.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A. (3) Allowances—Non-voted—								
Travelling allowance	3,096	3,125	1,101	1,992	1,897	1,343	2,537	15,091
Cost of passage	5,892	..	..	..	..	..	..	5,892
Allowances—Voted—								
Travelling allowance	2,605	3,401	4,783	8,935	3,928	5,671	3,049	32,372
Fixed travelling allowance ..	..	2,013	1,837	2,845	1,825	1,580	1,788	11,888
Other compensatory	1,529	423	441	366	4,417	408	472	8,056
Total, A. (3) ..	13,122	8,962	8,162	14,138	12,067	9,002	7,846	73,299
A. (4) Contingencies—Supplies and services—								
Non-voted—								
Rates and taxes	145	64	69	..	246	33	..	557
Voted—								
Rents of Public Works Department buildings	1,039	372	620	1,104	2,870	840	66	6,911
Apparatus and materials ..	32	98	122	145	164	254	128	943
Service postage and telegrams ..	929	999	1,084	1,172	703	730	802	6,419
Tour charges	955	281	502	172	149	115	44	2,218
Office expenses	151	116	10	439	372	461	156	1,705
Miscellaneous	168	342	517	367	119	169	879	2,561
Deduct recoveries on account of Public Works Department buildings	..	..	..	— 156	— 570	..	— 66	— 792
Total A. (4) ..	3,419	2,272	2,924	3,243	4,053	2,602	2,009	20,522
Total ..	55,008	60,658	55,783	1,00,892	61,213	61,646	61,469	(A) 4,56,669
Non-voted ..	32,905	13,202	7,604	13,077	8,881	4,935	13,404	94,008
Voted ..	22,103	47,456	48,179	87,815	52,332	56,711	48,065	5,62,661

*(A) Rs 21 to be added with reference to the Accountant-General's figures.

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

Budget heads.	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat	Nilambur.	Total.
OOTACAMUND CIRCLE—*cont.*								
			RS.	RS.		RS.	RS.	RS.
52. A.—*Capital Outlay.*								
52. A—*b*. Organization, improvement and extension of forests—								
b. A. Demarcation	..	..	..	— 1	..	6	..	5
Total, *b*. A. ..	..	..	..	— 1	..	6	..	5
b. C. Working plans ..	..	..	..	..	..	..	41	41
Total, *b*. C. ..	..	..	..	..	..	..	41	41
Total, 52. A. *b*. ..	..	..	..	— 1	..	6	41	46
Roads and bridges—								
Works in progress ..	..	..	..	— 2	..	..	284	282
New works	..	..	..	237	..	..	52	289
Buildings—								
Works in progress ..	..	..	..	— 81	..	..	..	— 81
New works	..	..	64	555	..	3,738	324	4,681
Other works—								
Works in progress ..	..	..	..	351	..	131	..	482
New works	..	..	..	..	..	5	1,512	1,517
Total ..	..	..	64	1,060	..	3,874	2,172	7,170
52. A.—*Capital Outlay on Forests.*								
52. A—*c*. Livestock, stores, tools and plant—								
c. A. Purchase of livestock ..	..	..	..	..	..	..	..	..
c. B. Stores, tools and plant..	..	..	— 5,928	— 3,854	..	40	..	— 9,742
Total, 52. A *c*. ..	..	..	..	..	..	..	..	..

Summary of Expenditure of the different districts for the year 1932–33—*cont.*

Budget heads.	Direction.	Mangalore, North.	Mangalore, South.	Wynaad.	The Nilgiris.	Palghat.	Nilambur.	Total.
			Rs.	Rs.		Rs.	Rs.	Rs.
OOTACAMUND CIRCLE—*cont.*								
52. A.—*Capital Outlay on Forests*—cont.	—							
52. A—*g.* Investments in Government commercial undertakings—								
o. Nilambur Valley Forests	..	..	..	..	..	..	+ 66,919	— 66,919
Write back of capital expenditure to Revenue ..	..	..	..	..	..	..	+ 42,074	42,074
Total 52, A. *g.* ..	..	..	..	..	..	..	+ 24,845	— 24,845
Grand Total ..	..	..	— 5,864	— 2,795	..	3,920	— 22,632	— 27,371

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

8. *a. General Direction.*

	Actuals, 1932-33.
	Rs.
Pay of officers—Non-voted	43,507
Deduct Emergency cut	— 5,044
Pay of establishments—Voted	26,954
Deduct Emergency cut	— 2,392
Clothing and equipment—Voted	14,088
Charges payable to Government, Departments and others—Voted—Payable to Central Government.	...
Non-voted—Travelling allowance including cost of passages	5,655
Other compensatory	1,541
Rates and taxes	324
Voted—Allowances	1,443
Rents	3,650
Books and periodicals	1,940
Service postage and telegram charges	2,500
Other charges	4,031
Total ...	98,227

8. *c. B. Research.*

	Actuals, 1932-33.
	Rs.
Pay of officers—Non-voted	15,045
Deduct Emergency cut ... ... --	1,984
Pay of establishments—Permanent	10,976
Temporary	24
Deduct Emergency cut ... ... —	863
Supplies and services—Voted—Petty supplies ...	6,503
Other charges—Non-voted—	
Allowances	35,20
Rates and taxes	94
Other charges—Voted—	
Allowances	3,545
Contingencies	1,036
Charges payable to Government, Departments and others—Subsidy to Indian Institute of Science.	19,659
Total ...	57,555

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

8. *c. C. Exploitation.*

	Actuals, 1932-33.			
	Forest Utilization officer.	Forest Engineer.	Salem Circle.	Total.
	Rs.	Rs.	Rs.	Rs.
Pay of officers—				
Non-voted	14,492	11,458	338	26,288
Deduct Emergency cut	— 1,725	— 1,626	— 34	— 3,385
Pay of officers—				
Voted	7,343	..	..	7,343
Deduct Emergency cut	— 734	..	..	— 734
Pay of establishments—Voted—				
Permanent	6,067	5,020	..	11,087
Temporary	6,438	1,482	..	7,920
Deduct Emergency cut	— 816	— 451	..	— 1,267
Allowances—Non-voted—				
Travelling allowances including cost of passages	6,300	3,603	..	9,603
Other compensatory	1,144	..	..	1,144
Advances—Voted—				
Travelling allowances	2,496	2,002	..	4,497
Fixed travelling allowances	..	297	..	297
Other compensatory	710	180	48	938
Other charges—Non-voted—				
Rates and taxes	130	..	..	130
Voted—				
Rents of Public Works Department buildings	1,642	2,628	..	4,170
Other contingencies	1,436	969	..	2,405
Apparatus and materials	..	91	..	91
Deduct recoveries on account of rent of Public Works Department buildings.	..	— 972	..	— 972
Total	44,822	24,681	352	69,755

Summary of Expenditure of the different districts for the year 1932-33—*cont.*

8. *c. D. Forest College.*

	Actuals, 1932-33.
	RS.
Pay of officers—Non-voted	23,148
Deduct Emergency cut	— 2,950
Pay of officers—Voted	21,759
Deduct Emergency cut	— 2,153
Pay of establishments—	
Permanent	20,956
Temporary	...
Deduct Emergency cut	1,046
Non-voted—Travelling allowance including cost of passages	4,630
Voted—Travelling allowances	4,934
Fees to Examiners	855
Pay of menials	1,940
Apparatus and materials	2,220
Horti-agricultural operations	1,098
Other petty supplies and contingencies.	5,264
Non-voted—Rates and taxes	19
Total ...	80,675

8. *c. E. Chenchu Officer.*

	Actuals, 1932-33.
	RS.
Pay of establishments—Temporary	14,051
Deduct Emergency cut	— 357
Travelling and other allowances	1,310
Contingencies	888
Supplies and Services	6,196
Total ...	22,088

Summary of Revenue and Expenditure for

Budget heads.	Waltair circle.	Bellary circle.	Working Plans circle.	Salem circle.	Coimbatore circle.	Ootacamund circle.
(1) ...	(2) ..	(3).	(4)	(5).	(6)	(7)
VIII. Forest Receipts.	RS.	RS.	RS.	RS.	RS.	RS.
(*a*) Timber and other produce removed from the forests by Government Agency—						
Sandalwood	54	....	..	2,97,037	2,06,616 ..	29,684
Other produce—						
Timber	42,673	34,821	17	3,582	2,16,573	10,64,244
Firewood and charcoal ..	4,162	1,127	..	554	365	39,539
Bamboos	4	1,567 ..	..	4	..	7,136
Other minor produce ..	7,115	..	..	541	878	996
Total, Other produce ..	53,954	37,515	17	4,681	2,17,816	11,11,915
Total (*a*) ..	54,008	37,515	17	3,01,718	4,24,432	11,41,599
(*b*) Timber and other produce removed from the forests by consumers or purchasers—						
Forest Department—						
Timber	47,453	32,245	..	2,347	67,886 ..	2,521
Firewood and charcoal.	1,62,881	83,583	..	62,140	1,26,876	72,369
Bamboos	1,21,285	69,952	..	1,23,664	40,714	14,219
Grazing and fodder grass	1,04,300	1,56,929	..	1,76,206	1,18,769	28,166
Other minor produce..	46,200	26,044	..	37,821	67,681	19,726
Total, Forest Department ..	4,82,119	3,68,753	..	4,02,178	4,21,926	1,37,001
Revenue Department—						
Timber	18,854	14,630	..	33,582	10,087	14,445
Firewood and charcoal	12,898	6,904	..	20,788	25,485	11,496
Bamboos	78	..	..	40	4	18
Other minor produce..	41,895	1,93,260	..	73,498	31,120	6,398
Total, Revenue Department ..	73,725	2,14,794	..	1,27,908	66,696	32,357
Total (*b*) ..	5,55,844	5,83,547	..	5,30,086	4,88,622	1,69,358
(*c*) Drift and waifwood and confiscated forest produce ..	3,770	1,841	..	670	980	1,258
(*f*) Miscellaneous—						
Fines and forfeitures ..	7,364	5,898	..	9,857	1,610	195
Forest College	..	..	..	..	..	..
Rent of buildings	7,326	9,525	686	8,005	9,053	13,107
Other sources	45,623	49,083	561	67,652	65,226	44,647
Total (*f*) ..	60,313	64,506	1,247	85,514	75,889	61,813
Grand total ..	6,73,935	6,87,409	1,264	9,17,988	9,89,923	13,74,028
Deduct—Refunds—Voted—						
Refunds by Forest officers ..	1,694	7,145	17	10,196	7,346	4,195
Net total for the Presidency ..	6,72,241	6,80,264	1,247	9,07,792	9,82,577	13,69,833
Receipts in England	..	..	..	..	..	..

1932-33 (Abstract for the Presidency).

Forest Engineer.	Forest Utilization Officer.	Parlakimedi mallas.	Golgonda Agency.	Forest college.	Provincial Sylvioulturist.	Chenchu officer.	Chief Conservator.	Total.	
								1932-33.	1931-32.
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
..	..	..	..	.. ..	..	...	..	5,33,391	4,59,285
..	48	2,317	2,977	.. ..	..	..	..	13,67,252	6,69,796
..	..	1,968	..	.. ..	....	...	..	47,715	57,181
..	..	..	..	..	..	..	..	8,711	1,734
..	..	175	..	..	..	..	..	9,705	14,150
..	48	4,460	2,977	..	..	..	..	14,33,383	6,81,105
..	48	4,460	2,977	..	..	..	..	19,66,774	11,40,390
..	..	6,707	388	.	..	..	..	1,59,547	1,04,163
..	..	4,558	..	.. ..	..	...	..	5,12,407	6,02,390
..	..	4,161	430	..	..	..	..	3,74,425	3,35,424
..	..	1,543	266	..	..	..	..	5,86,179	5,58,800
..	..	13,472	..	.. ..	..	..	..	2,10,944	1,97,070
..	..	30,441	1,084	..	..	..	..	18,43,502	17,94,470
..	..	..	..	..	..	..	..	91,598	1,01 839
..	..		..	..	..	..	..	77,671	81,852
..	..	..	..	..	..	..	..	140	223
..	..	..	..	.. ..	..	..	..	3,46,171	3,89,473
..	..	..	..	..	..	..	..	5,15,480	5,73,387
..	..	30,441	1,084	..	..	..	..	23,58,982	23,70,116
..	..	59	24	..	..	..	..	8,602	9,382
..	..	121	45	..	..	..	..	28,954	24,942
..	..	..	..	38,480	..	..	..	39,480	55,794
..	197	185	50	1,277	..	..	..	49,411	52,680
33,496	108	849	398	.. 701	....	..	9,212	3,17,556	2,78,550
33,496	305	1,155	493	40,458	....	...	9,212	4,34,401	3,99,234
33,496	353	36,115	4,578	40,458	..	..	9,212	47,68,759	42,90,269
..	..	16	21	.. ..	..	..	..	30,630	35,895
33,496	353	36,099	4,557	40,458	..	...	9,212	47,38,129	42,54,874
..	..	..	..	.. ..	....	..	..	+ 40	..
								47,38,169	

Summary of Revenue and

Budget heads.	Waltair Circle.	Bellary Circle.	Working Plan Circle.	Salem Circle.	Coimbatore Circle.	Ootacamund Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
EXPENDITURE.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. *b. Conservancy, Maintenance and Regeneration.*						
A. Forest produce removed by Government Agency—Voted.						
Timber	9,961	7,351	..	865	78,650	25,111
Firewood and charcoal ..	192	146	..	..	197	11,439
Bamboos	..	864	..	..	..	4,960
Sandalwood	..	45	..	38,812	17,788	3,651
Grass and other minor produce	6,670	..	..	..	677	293
Total, A ..	16,823	8,406	..	39,677	97,312	2,71,534
B. Timber and other produce removed from the Forests by consumers or purchasers	41,465	39,907	..	41,143	37,551	13,018
C. 1. Feed and upkeep of cattle.	1,004	1,766	..	52	16,668	62,583
2. Renewals and replacements of tools and plant	10,298	607	262	446	1,906	4,128
D. 1. Roads and bridges ..	7,694	8,714	..	12,544	33,754	27,970
2. Buildings and other works—						
Non-voted—						
Rates and taxes ..	643	957	..	1,195	490	908
Voted—						
Buildings ..	14,639	10,202	98	13,754	10,390	9,751
Forest college ..	..	..	..	..	..	..
Other works ..	594	97	..	545	1,160	952
Total, D ..	23,570	19,970	98	28,038	45,794	39,581
E. 1. Regeneration	6,006	2,841	..	5,436	10,240	37,047
2. Fire protection	10,096	3,732	..	4,851	6,174	13,854
3. Other works—						
Maintenance of boundaries.	3,229	624	..	294	1,141	1,801
Forest surveys ..	..	595	..	..	2,952	1
Other items	5,281	497	..	..	..	729
		— 55				
Total, E ..	24,612	8,234	..	10,581	20,507	53,432
F. Other charges—						
Non-voted—						
Rates and taxes	28	..	..	..	235	1,562
Voted—						
Grants to the Nilgiris Games Association.	..	..	..	..	..	3,830
Honoraria	50	265	..	520	203	150
Supplies and services ..	94	404	..	3,147	42	1,880
Miscellaneous	6,904	333	..	177	5,154	6,836
Total, F ..	7,076	1,002	..	3,844	5,634	14,258
H. Suspense—Works advances.	..	..	..	..	— 248	— 1,027
Total, Presidency ..	1,24,848	79,892	360	1,23,781	2,25,129	4,57,507

Expenditure for 1932–33—*cont.*

Forest Engineer.	Forest Utilization Officer.	Parlakimedi Maliahs.	Golgonda Agency.	Forest College.	Provincial Sylviculturist.	Chenchu officer.	Chief Conservator.	Total. 1932–33.	Total. 1931–32.
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
..	630	1,004	1,930	..	..	..	..	3,51,582	2,94,237
..	..	236	..	..	..	..	..	12,210	10,734
..	..	..	..	..	..	..	..	5,824	1,363
..	7	..	..	..	..	..	..	60,303	40,951
..	..	65	..	..	..	..	..	..	..
								7,705	8,928
..	637	1,305	1,930	..	..	..	..	4,37,624	3,56,213
..	..	1,810	589	..	..	..	..	1,75,483	1,94,297
..	..	..	..	..	..	..	..	82 073	59,576
1,012	31	12	..	..	..	..	2,342	21,044	24,678
..	..	..	..	..	..	..	..	90,676	1,03,418
..	..	..	..	106	..	..	..	4,299	4,519
37	..	122	200	..	..	253	..	59,446	69,837
..	..	..	..	3,398	..	..	..	3,398	..
..	..	..	..	..	..	..	..	3,348	3,196
37	..	122	200	3,504	..	253	2,342	1,61,167	18,090
..	..	131	266	..	..	..	..	61,967	69,349
..	..	388	69	..	..	..	..	39,164	35,619
..	..	..	383	..	..	..	..	7,472	5,824
..	..	..	..	..	..	..	10,680	11,276	9,539
..	..	..	10	..	..	..	..	9,414	7,617
..	..	519	728	..	..	..	10,680	1,29,293	1,27,948
..	1	..	..	..	..	..	..	1,826	2,048
..	..	..	..	..	..	..	..	3,830	4,671
..	..	..	..	..	..	..	..	1,188	1,088
..	..	..	..	..	..	..	..	5,567	5,007
75	..	..	..	..	..	..	..	19,479	9,898
75	..	..	..	..	..	..	..	31,890	22,712
1,011	..	..	..	..	..	..	..	— 259	— 906
2,135	669	3,768	3,447	3,504	..	253	13,022	10,38,315	9,71,522

Summary of Revenue and

Budget heads.	Waltair Circle.	Bellary Circle.	Working Plans Circle.	Salem Circle.	Coimbatore Circle.	Ootacamund Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
EXPENDITURE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8. *c. Establishments.*						
Pay of officers—						
Non-voted	95,471	77,793	..	97,668	87,193	82,494
Deduct emergency cut	— 9,819	— 7,994	..	— 10,587	— 9,599	— 10,027
Pay of officers—						
Voted	28,426	29,919	..	27,206	32,628	67,465
Deduct emergency cut	— 2,662	— 2,738	..	— 2,721	— 3,207	— 6,747
Pay of establishments—Voted—						
Permanent	2,27,709	2,33,073	..	2,23,569 (*b*) — 27	2,11,996	2,31,790 (*a*) + 32
Temporary	6,601	4,190	..	8,671 (*b*) — 4	4,505	9,399
Deduct emergency cut	— 10,537	— 10,994	..	— 9,800 (*b*) + 8	— 10,064	11,527 (*a*) — 4
Allowances—Non-voted—						
Travelling allowance	14,226	8,833	..	10,228	13,744	15,092
Cost of passage	..	..	..	1,978	..	5,892
Allowances—Voted—						
Travelling allowance	25,955	22,272	..	19,110	22,271 (*a*) + 8	32,372 (*a*) — 8
Fixed travelling allowance	9,315	10,030	..	9,131	9,579	11,888
Other compensatory	3,964	4,752	..	3,250	3,753	8,056
Contingencies and supplies and services.	..	..	..	..	..	..
Non-voted—						
Rates and taxes	2,897	2,084	..	2,029	2,613	557
Voted—						
Rents of Public Works Department buildings.	12,703	9,836 (*a*) + 160	..	15,658	9,909	6,911
Apparatus and materials	987	862	..	730	1,002	944
Service postage and telegrams.	7,470	6,292	..	5,840	5,161	6,419
Tour charges	3,803	4,341	..	2,993	2,916	2,218
Office expenses	3,221	3,968	..	2,979	4,201	1,705
Miscellaneous	925	1,951	..	1,618	927	2,561
Telephone charges	..	..	..	..	..	..
Deduct recoveries on account of Public Works Department buildings.	— 4,002	— 2,501	..	— 5,637	— 3,131	— 792
Total	4,16,653	3,96,099	..	4,03,885	3,86,405	4,56,690
8. *c* B. Research	..	..	..	..	..	..
8. *c.* C. Exploitation	..	..	..	..	..	..
8. *c.* D. Forest College	..	..	..	..	..	..
8. *c.* E. Chenchu Officer	..	..	..	..	..	..
8. (*d*) Losses in Government, commercial undertaking Russellkonda Saw Mills.	1,92,763	..	..	..	..	..
52-*A. Capital Outlay on Forests.*	..	..	..	..	..	..
I. (*a*) Forest surveys	..	..	..	..	..	..
(*b*) Organization, improvement and extension of Forests—Reserved—	..	..	..	..	..	..
A. Demarcation—Voted—	..	..	..	..	..	..
Demarcation	1,815	..	..	416	284	5
Cost of forest settlement and compensation for land and rights.	..	..	..	..	..	..

(*a*) Added to the circle figure with reference to the Accountant-General's actuals.
(*b*) Added or deducted with reference to the Accountant-General's actuals.

Expenditure for 1932-33—*cont.*

Forest Engineer.	Forest Utilization Officer.	Parlakimedi Maliahs.	Golgonda Agency.	Forest College.	Provincial Sylviculturist.	Chenchu Officer.	Chief Conservator.	Total. 1932-33.	Total. 1931-32.
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
..	..	..	..	..	..	..	..	4,40,619	3,98,856
..	..	..	..	..	..	..	..	— 48,026	..
..	..	8,450	..	..	..	..	..	1,94,094	1,75,058
..	..	— 845	..	..	..	..	..	18,920	..
..	..	16,214	2,661	..	..	..	..	11,47,017	11,58,817
..	..	1,066	756	..	..	..	..	35,184	
..	..	— 853	— 113	..	..	..	..	— 53,889	..
..	..	..	..	..	..	..	..	62,123	67,305
..	..	..	..	..	..	..	..	7,870	17,926
..	..	3,396	349	..	..	..	..	1,25,725	1,47,204
..	..	614	131	..	..	..	..	50,688	52,461
..	..	252	61	..	..	..	..	24,095	24,115
..	..	..	..	..	..	..	..	..	481
..	..	..	27	..	..	..	..	10,207	8,853
..	..	1,932	324	..	..	..	..	57,403	62,014
..	..	92	..	..	..	..	..	4,617	4,088
..	..	200	60	..	..	..	..	31,442	27,599
..	..	513	93	..	..	..	..	16,877	15,207
..	..	818	8	..	..	..	..	16,900	15,357
..	..	63	92	..	..	..	..	8,137	10,728
..	..	..	..	..	..	..	..	..	38
..	..	— 760	..	..	..	..	..	— 16,823	— 16,877
..	..	31,159	4,449	..	..	..	..	20,95,340	21,75,699
..	..	..	..	..	..	..	..	57,555	20,124
..	..	..	..	..	..	..	..	69,755	68,741
..	..	..	..	..	..	..	..	80,675	67,666
..	..	..	..	..	..	..	..	22,088	25,378
..	..	..	..	..	..	..	..	1,92,768	23,57,708
..	..	..	..	..	..	..	..	..	925
..	..	..	12	..	..	..	..	2,526	2,601
..	..	..	..	..	..	..	..	..	76

Summary of Revenue and

Budget heads.	Waltair Circle.	Bellary Circle.	Working Plans Circle.	Salem Circle.	Coimbatore Circle.	Ootacamund Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
EXPENDITURE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
52-*A. Capital Outlay on Forests* —cont.						
B. Sowing and planting ..	3,897	..	..	..	914	..
C. Other charges—Voted—						
Working plans ...	..	..	13,655	..	..	41
Other miscellaneous charges.	..	..	..	..	596	..
Total, I. ..	5,712	..	13,655	410	1,794	46
(*c*) Communications and buildings—						
A. Roads and bridges—						
Works in progress	1,897	855	..	..	531	282
New works	829	..	..	..	1,455	289
B. Buildings—						
Works in progress	2,829	..	..	1,800	711	— 82
New works	1,578	1,848	..	..	1,107	4,681
C. Other works—						
Works in progress	..	..	..	214	..	482
New works	94	347	..	169	1,029	1,517
Total (*c*) ..	7,227	3,050	..	2,183	4,833	7,169
(*d*) Railways and tramways ..	425	..	..	..	..	..
(*e*) Livestock, stores, tools and plant—						
A. Livestock—Purchase of livestock	..	..	..	..	— 1,323	— (*a*) 13
B. Stores, tools and plant ..	100	72	171	..	184	— 9,729
Total (e) ..	100	72	171	..	— 1,139	—(*a*) 9,742
(*g*) Investments in Government commercial undertakings—						
A. Russellkonda sawmill.	— 3,41,926	..	..	..	..	..
B. Mount Stuart forests..	..	..	..	..	— 37,297	..
C. Nilambur valley forests.	..	..	..	..	..	—(*a*) 63,326
D. Chenat Nair Exploitation scheme including Olavakkot saw mill ..	..	..	..	..	..	..
Loss or gain by exchange.	..	..	..	..	..	..
Total (*g*) ..	— 3,41,926	..	..	..	— 37,297	— 63,326

Expenditure for 1932–33—*cont.*

Forest Engineer. (8)	Forest Utilization officer. (9)	Parlakimedi Maliahs. (10)	Golgonda Agency. (11)	Forest College. (12)	Provincial Sylviculturist. (13)	Chenchu Officer. (14)	Chief Conservator. (15)	Total. 1932–33. (16)	Total. 1931–32 (17)
Rs.			Rs.			Rs.		Rs.	Rs.
..	..	..	..	..	..	..	..	4,811	5,805
..	..	..	..	..	..	..	..	13,696	22,029
..	..	..	..	..	..	..	..	596	32
..	..	..	12	..	..	..	..	21,629	31,468
8,834	..	..	..	..	..	..	..	12,399	16,669
1,751	..	..	..	..	..	..	..	4,324	8,080
..	..	..	..	..	..	..	..	5,258	4,727
— 441	..	..	..	..	..	..	..	8,773	23,758
..	..	..	..	..	..	..	..	696	1,346
..	..	..	..	..	..	492	..	3,648	2,456
10,144	..	..	..	..	..	492	..	35,098	57,036 + 41 + 3,825
..	..	..	..	..	..	..	..	425	2,623
..	..	..	..	..	..	..	..	— 1,336	7,212
— 526	..	..	..	..	..	..	..	— 9,728	2,262
									+ 362
— 526	..	..	..	..	..	..	..	— 11,064	+ 2,595
									12,431
..	..	..	..	..	..	..	..	— 3,41,926	56,236
..	..	..	..	..	..	..	..	— 37,297	— 20,050
— 3,694	..	..	..	..	..	..	..	— 66,920	10,085
— 2,22,719	..	..	..	..	..	..	..	— 2,22,719	..
..	..	..	..	..	..	..	..	..	— 51,156
— 2,26,313	..	..	..	..	..	..	..	— 6,68,862	— 4,885
									+ 1,785
									— 27,485

Summary of Revenue and

Budget heads	Waltair Circle.	Bellary Circle.	Working Plan Circle.	Salem Circle.	Coimbatore Circle.	Ootacamund Circle.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
EXPENDITURE—*cont.*						
52. *A. f. Establishments.*			Rs.			
Write back of capital expenditure to Revenue	1,49,163	..	..	..	— 4,384	42,075
II. *Deduct* receipts and recoveries on Capital Account	..	..	..	..	..	..
III. *Deduct* English cost of stores	..	..	..	..	..	..
IV. Expenditure in England	..	..	..	..	..	..
A. Pay of officers—						
Non-voted	..	..	72,698	..	..	..
Deduct emergency cut	..	..	— 7,940	..	..	..
Voted	..	..	24,971	..	..	..
Deduct emergency cut	..	..	— 2,497	..	..	..
B. Pay of establishments—						
Voted—						
Permanent	..	..	(*a*) 58,901	..	..	..
Temporary	..	..	(*a*) 715	..	..	..
Deduct emergency cut	..	..	(*a*)— 3,450	..	..	..
C. Other charges—Non-voted—						
Travelling allowances (including cost of passages)	..	..	12,315	..	..	..
Voted—						
Travelling allowances	..	..	16,324	..	..	..
Fixed travelling allowances	..	..	5,591	..	..	..
Other compensatory	..	..	3,015	..	..	..
Contingencies	..	..	5,947	..	..	..
Supplies and services	..	..	1,190	..	..	..
Total	..	..	1,87,780	..	..	..
						Abst
VIII. Forest—Receipts of this Presidency.	..	..	..	..	..	..
Receipts in England	..	..	..	..	..	..
Total Receipts	..	..	..	..	..	..
8. Expenditure—						
(*a*) General Direction—Chief Conservator's office.	..	..	..	..	..	..
(*b*) Conservancy, maintenance and regeneration.	..	..	..	..	..	..
(*c*) A. District establishments.	..	..	..	..	..	..
B. Research	..	..	..	..	..	..
C. Exploitation (including the Forest Engineering and the Utilization officers' division).	..	..	..	..	..	..
D. Forest College	..	..	..	..	..	..
E. Chenchu Officer	..	..	..	..	..	..
(*d*) Losses in Government commercial undertakings.	..	..	..	..	..	..

(*a*) Modified with reference to the

Expenditure for 1932-33—*cont.*

Forest Engineer.	Forest Utilization officer.	Parlakimedi Maliahs.	Golgonda Agency.	Forest College.	Provincial Sylviculturist.	Chenchu officer.	Chief Conservator.	Total. 1932-33.	Total. 1931-32.
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
								Rs.	Rs.
2,22,719	..	..	..	..	..	..	..	4,09,573	..
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	72,698	54,722
..	..	..	..	..	..	..	..	— 7,940	..
..	..	..	..	..	..	..	..	24,971	28,937
..	..	..	..	..	..	..	..	— 2,497	..
..	..	..	..	..	..	..	..	58,901	45,822
..	..	..	..	..	..	..	..	715	14,230
..	..	..	..	..	..	..	..	— 3,450	..
..	..	..	..	..	..	..	..	12,315	12,175
..	..	..	..	..	..	..	..	16,324	20,835
..	..	..	..	..	..	..	..	5,591	6,873
..	..	..	..	..	..	..	..	3,015	4,019
..	..	..	..	..	..	..	..	5,947	5,092
..	..	..	..	..	..	..	..	1,190	1,598
..	..	..	..	..	..	..	..	1,87,780	1,94,353
ract.									
..	..	..	..	..	..	..	..	47,38,129	..
..	..	..	..	..	..	..	..	40	..
..	..	..	..	..	..	..	..	47,38,169	42,64,874
..	..	..	..	..	..	..	..	98,227	1,30,850
..	..	..	..	..	..	..	..	10,38,315	9,71,522
..	..	..	..	..	..	..	..	20,95,340	21,75,699
..	..	..	..	..	..	..	..	57,555	63,963
..	..	..	..	..	..	..	..	69,755	68,741
..	..	..	..	..	..	..	..	80,675	67,666
..	..	..	..	..	..	..	..	22,088	25,378
..	..	..	..	..	..	..	..	1,92,763	..

Accountant-General's actuals.

Summary of Revenue and

Budget heads.	Waltair Circle.	Bellary Circle.	Working Plan Circle.	Salem Circle.	Coimbatore Circle	Ootacamund Circle
(1)	(2)	(3)	(4)	(5)	(6)	(7)
EXPENDITURE—*cont.*						
52. *A. f Establishments*—cont.	Rs.					
(*e*) Loss by exchange ..	..	..	..	..	..	..
Expenditure in England on stores and other than stores.	..	..	..	..	..	..
20. Interest—Interest on deposits from Depreciation Reserve of Government commercial undertakings.	..	..	..	..	..	..
52. *A. Capital Outlay on Forests.*						
I. (*a*) Forest surveys ..	..	..	..	..	..	..
(*b*) Organization, improvements and extension of forests—Reserved.						
						Abst
I (*c*) Communications and buildings.	..	..	..	..	..	..
(*d*) Railways and tramways.	425	..	..	..	..	..
(*e*) Livestock, stores, tools and plant.	..	..	..	..	..	..
(*f*) Establishments—Working Plans Circle	..	..	..	..	..	..
(*g*) Investments in commercial undertakings.	..	..	..	..	..	..
(*h*) Write back of capital expenditure to Revenue.	..	..	..	..	..	..
(*i*) *Deduct*—Receipts and recoveries on Capital Account.	..	..	..	..	..	..
(*j*) *Deduct*—English cost of stores.	..	..	..	..	..	..
(*k*) Expenditure in England.	..	..	..	..	..	..
Grand total ..	..	..	..	..	..	..
Surplus ..	..	..	..	..	..	..

Expenditure for 1932-33—*cont.*

Forest Engineer. (8)	Forest Utilization officer. (9)	Parlakimedi Maliahs. (10)	Golgonda Agency. (11)	Forest College. (12)	Provincial Sylviculturist. (13)	Chenchu officer. (14)	Chief Conservator. (15)	Total. 1932-33. (16)	Total. 1931-32. (17)
								Rs.	Rs.
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	1,59,853	1,87,507
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	21,629	924 30,555
ract.									
..	..	..	..	..	..	..	..	35,098	60,902
..	..	..	..	..	..	..	..	425	2,623
..	..	..	..	..	..	..	..	— 11,064	12,431
..	..	..	..	..	..	..	..	1,87,780	1,94,353
..	..	..	..	..	..	..	..	—6,68,862	— 3,100
..	..	..	..	..	..	..	..	4,09,573	..
..	..	..	..	..	..	..	..	..	— 3,344
..	..	..	..	..	..	..	..	..	— 2,623
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	37,89,150	39,86,787
..	..	..	..	..	..	..	..	9,49,019	..

Annual Form No. 41.

Forest Department, Madras Presidency.

Revenue received and outstandings on account of revenue during the year 1932–33.

District.	Particulars.	Outstandings at commencement of the year.	Value of sales and other revenue during the year.	Total.	Amount realised during the year.	Balance due to the department at the end of the year.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Waltair Circle.						
Direction	Timber and other produce.	..	2,328 0 0	2,328 0 0	2,328 0 0	
Ganjam	Do.	12,264 18 0	1,00,456 11 0	1,12,721 8 0	98,498 0 0	14,223 8 0
Parlakimedi Maliahs ..	Do.	3 0 0	36,292 14 0	36,295 14 0	36,099 0 0	196 14 0
Vizagapatam	Do.	0 2 0	49,505 14 0	49,506 0 0	49,471 0 0	35 0 0
Godavari, Upper	Do.	261 2 0	96,027 5 0	96,288 7 0	89,104 0 0	7,184 7 0
Do. Lower	Do.	6,980 8 0	2,35,287 10 0	2,42,268 2 0	2,30,549 0 0	11,719 2 0
Guntur	Do.	7,679 4 0	1,06,675 14 0	1,14,355 2 0	97,765 0 0	16,590 2 0
Nellore	Do.	50,741 4 0	1,26,179 12 0	1,76,921 0 0	1,09,083 0 0	67,838 0 0
	Total ..	77,930 1 0	7,52,754 0 0	8,30,684 1 0	7,12,897 0 0	1,17,787 1 0
Bellary Circle.						
Direction	Timber and other produce.	..	210 7 0	210 7 0	210 7 0	
Anantapur	Do.	86,445 15 0	1,26,791 13 8	2,13,237 12 8	1,73,950 0 5	39,287 12 3
Kurnool, East	Do.	1,524 7 0	49,065 11 8	50,590 2 8	50,440 2 8	150 0 0
Do. South	Do.	57,014 10 0	1,00,300 14 4	1,57,315 8 4	1,26,251 11 7	31,008 12 9
					(a) 55 6 0	
Do. West	Do.	30,450 8 0	1,12,880 7 2	1,43,330 15 2	1,37,440 14 2	5,890 1 0
Cuddapah, North	Do.	13,318 0 0	90,017 0 6	1,03,335 0 6	83,341 14 6	19,993 2 0
Do. South	Do.	59,436 5 2	85,906 5 2	1,45,342 10 4	1,08,573 6 4	36,769 4 0
	Total ..	2,48,189 13 2	5,65,172 11 6	8,13,362 8 8	6,80,263 8 8	(b) 1,33,099 0 0
				(c) + 237 0 0	(c) + 237 0 0	

Salem Circle.							
Direction	Timber and other forest produce.	..	404 10 10	404 10 10	404 10 10	..	
Chittoor	Do.	66 0 0	76,491 6 1	76,557 6 1	76,547 6 1	10 0 0	
Vellore, East	Do.	147 13 0	3,27,310 4 4	3,27,458 1 4	3,24,179 1 4	3,279 0 0	
Do. West	Do.	..	2,05,736 14 7	2,05,736 14 7	2,05,708 6 7	28 8 0	
Salem, North	Do.	101 9 0	62,922 15 4	63,024 8 4	62,908 8 4	116 0 0	
Do. Central	Do.	404 8 0	1,66,864 13 9	1,67,269 5 9	1,66,750 13 9	518 8 0	
Do. South	Do.	31 0 0	81,660 10 8	81,691 10 8	81,488 10 8	203 0 0	
	Total ..	750 14 9	9,21,391 11 7	9,22,142 9 7	9,17,987 9 7	4,155 0 0	
					— 10,195 13 6 Refunds		
					9,07,791 12 1		
Coimbatore Circle.				(*k*) — 5,642 0 0	(*k*) — 5,642 0 0		
Direction	Timber and other forest produce.	..	27 7 0	27 7 0	27 7 0		
Kollegal	Do.	6,499 11 5	1,47,318 10 5	1,53,818 5 10	1,35,854 5 10	17,964 0 0	
Coimbatore, North ..	Do.	1,35,371 3 3	2,12,821 7 2	3,48,192 10 5	(*a*) 2,54,662 5 7	93,530 4 10	
Do. South ..	Do.	97,743 15 0	2,56,700 13 9	3,57,467 9 9	(*b*) 3,15,454 12 6	42,012 13 3	
Madura	Do.	3,022 13 0					
Tinnevelly	Do.	61,746 8 1	1,37,804 8 10	1,99,551 0 11	1,69,418 9 8	30,132 7 3	
Tanjore	Do.	1,412 8 9	1,29,360 11 11	1,30,773 8 11	(*c*) 97,364 10 2	33,408 9 9	
	Total ...	3,05,796 10 9	14,571 14 3	14,571 14 3	14,571 14 3		
			8,98,605 9 4	12,04,402 4 1	(*g*) 9,87,354 1 0	(*e*) 2,17,048 3 1	
				(*d*) + 27 10 0	(*d*) + 27 10 0		
				(*b*) — 181 0 0	(*b*) — 181 0 0		
Ootacamund Circle.							
Mangalore, North ..	....	26,505 15 6	94,258 9 6	1,20,764 9 0	1,11,322 6 10	9,442 2 2	
Do. South ..	....	35,262 9 11	2,54,218 0 10	2,89,480 10 9	2,63,973 3 5	25,507 7 4	
Wynad	....	35,045 4 4	3,42,380 3 0	3,77,425 7 4	2,43,451 10 7	1,33,973 12 9	
The Nilgiris ..	....	8,026 6 9	88,193 3 11	96,219 10 8	86,389 5 6	9,830 5 2	
Palghat	....	1,26,569 14 0	2,06,756 11 11	3,33,326 9 11	2,96,808 11 11	36,517 14 0	

Revenue received and outstandings on account of revenue during the year 1932-33—*cont.*

District.	Particulars.	Outstandings at commencement of the year.	Value of sales and other revenue during the year.	Total.	Amount realized during the year.	Balance due to the department at the end of the year.
Ootacamund Circle—cont.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Nilambur	..	..	4,79,660 0 3	4,79,660 0 3	3,67,508 12 3	(*a*) 1,12,151 4 0
Direction	..	..	1,161 1 7	1,161 1 7	1,161 1 7	..
	Total ..	2,31,410 2 6	14,66,627 15 0	16,98,038 1 6	(*b*) 13,70,615 4 1	(*c*) 3,27,422 13 5
					46,53,363 3 10 or in round figure 46,53,363 0 0	..
	..	..	..	..		
Add Working Plan Circle.	..	..	..	..	1,247 0 0	..
Forest Engineer ..	..	..	..	..	33,496 0 0	..
Forest Utilization Officer.	..	..	..	..	353 0 0	..
Forest College	..	..	..	..	40,458 0 0	..
Chief Conservator ..	..	..	..	..	9,212 0 0	..
Receipts in England ..	..	..	..	..	40 0 0	..
	Grand Total, Presidency.	..	..	..	47,38,169 0 0	..

Note for Bellary Circle.

(*a*) A sum of Rs. 50 relating to fines and forfeitures was written off in Conservator's No. A-1-250/33, dated 24th February 1933.
A sum of Rs. 5 relating to compensation amount was written off in Conservator's No. A-1-1417/32, dated 6th September 1932.
(*b*) Out of this amount, the sum of Rs. 1,27,913-14-3 falls due after 31st March 1933.
(*c*) *Add* Rs. 237 realized in Salem Circle.

Note for Salem Circle.

This return is worked out to the nearest pie.
Form 39 is worked out to the nearest rupee.
(*k*) Relates to Bellary and Coimbatore circles (Rs. 237 + Rs. 5,405).

(a) Excludes Rs. 600 relating to the Nilgiris district.
(b) Includes Rs. 133-11-9 realized by sale of tusks relating to North Coimbatore and Rs. 588 realized in Vellore division in Salem Circle.
(c) Includes Rs. 5,405 realized in the Salem Circle.
(d) Rupees 27-10-0 added with reference to the Accountant-General's March final adjustments.

Note for Coimbatore Circle.

(e) Of this, a sum of Rs. 12,882-7-3 was overdue on 31st March 1933, as shown below :—

	Rs.	A.	P.
North Coimbatore	509	5	4
South Coimbatore	5,614	0	0
Madura	6,071	1	11
Tinnevelly	691	0	0

(f) *Deduct* Rs. 181 realized for the Ootacamund Circle taken into account by the latter circle.
(g) Excludes Rs. 600 relating to Ootacamund circle but includes Rs. 4,624 relating to other circles.

(a) Out of this amount a sum of Rs. 2,140 since has been adjusted by the Accountant-General in 1932-33 accounts itself.
(b) Includes Rs. 181 realized in the South Coimbatore division being the sale-proceeds of ivory pertaining to Wynad and Nilgiris divisions (Rs 174 and Rs. 7) respectively, and Rs. 600 realized in North Coimbatore division pertaining to Nilgiris division.

Note for Ootacamund Circle.

(c) Out of this a sum of Rs. 16,668-2-6 fell due within the year.

ANNUAL FORM No. 42.

Forest Department, Madras Presidency.

Financial Results for the year 1932-33.

District.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection and improvements of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Waltair Circle.							
Ganjam	3,403	369	96,154	79,835	45,843	99,557	1,26,047
Parlakimedi Maliahs.	4,460	2,700	31,694	34,373	1,344	36,154	38,417
Vizagapatam (including Golugonda Agency).	7,582	7,871	41,981	42,859	9,657	49,563	60,387
Godavari, Upper.	32,343	16,018	56,881	57,396	26,571	89,224	99,985
Do. Lower.	5,788	9,960	2,25,257	96,304	23,694	2,31,045	1,29,958
Guntur	61	1,136	98,420	67,801	4,509	98,481	73,446
Nellore	7,809	12,236	1,02,795	48,490	8,834	1,10,604	69,560
Total ..	61,446	50,290	6,53,182	4,27,058	1,20,452	7,14,628 (*a*) — 1,731	5,97,800
						7,12,897	
Bellary Circle.							
Anantapur ..	(*a*) 216	39	1,73,978	44,338	14,403	1,74,194	58,780
Kurnool, East ..	7,400	2,890	43,067	57,555	20,229	50,467	80,674
Do. South.	20,014	3,112	1,06,327	56,641	19,725	1,26,341	79,478
Do. West ..	4,193	1,317	1,33,294	68,159	23,695	1,37,487	93,171
Cuddapah, North	36	..	83,345	61,902	18,531	83,381	80,433
Do. South.	(*b*) 5,894	1,048	1,02,737	65,366	20,083	1,08,631	86,497
Total ..	37,753	8,406	6,42,748	3,53,961	1,16,666	(*d*) 6,80,501	4,79,033 (*c*) + 80
							4,79,113

Note for Waltair Circle—
(*a*) Represents refunds.

Note for Bellary Circle—
(*a*) Value of sandalwood realized in Vellore division
(*b*) Includes the sum of Rs. 21 being the value of sandalwood realized in Vellore division.
(*c*) Added to tally with the Accountant-General's figures.
(*d*) Includes Rs. 237 realized in the Salem circle.

Financial Results for the year 1932-33—*cont.*

District	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection and improvements of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts	Charges.
Salem Circle.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Chittoor	3,043	1,362	73,787	69,581	19,074	76,830	90,017
Vellore, East ..	81,513	10,849	2,16,593	1,05,953	11,401	2,98,106	1,28,203
Do. West ..	20,313	2,639	15,566	13,651	7,056	35,879	23,346
Salem, North ..	1,40,977	44,966	62,494	65,821	(*b*) 32,092	2,03,471	1,42,879
Do. Central ..	38,281	9,798	1,66,270	72,285	9,906	2,04,551	91,989
Do. South ..	2,596	3,053	81,559	61,417	9,044	91,155	73,514
Total ..	(*a*)2,93,723	72,667	6,16,269	3,88,708	88,573	9,09,992	5,49,948
						(*c*)— 10,196	
						8,99,796	
						(*d*) + 2,353	
						9,02,149	
Coimbatore Circle.							
Kollegal ..	69,815	11,546	66,045	58,673	9,401	1,35,860	79,620
Coimbatore, North.	1,36,426	20,155	1,18,243	82,385	19,526	2,54,669	1,22,066
Coimbatore, South.	2,11,139	77,578	1 04,322	51,515	43,297	3,15,461	1,72,390
Madura	1,320	1,103	1,68,103	95,066	23,427	1,69,423	1,19,596
Tinnevelly ..	8,594	3,407	88,775	60,541	15,632	97,369	79,580
Tanjore	..	39	14,572	1,875	167	14,572	2,081
Total ..	4,27,294	1,13,828	5,60,060	3,50,055	1,11,450	9,87,354	5,75,333
			(*a*) + 28			(*b*) + 28	(*c*) + 8
						9,87,382	5,75,341
						(*d*) — 181	

Note for Salem Circle—

(*a*) Excludes Rs. 7,994 of sandalwood revenue relating to other circles.
(*b*) Includes Rs. 19,659 spent on the investigation of spike.
(*c*) Refunds. The figures in this return agree with form 39.

	Rs.
Total receipts as per Form No. 39	9,07,791
Deduct revenue relating to Bellary and Coimbatore Circles (Rs. 237 + 5,405) taken into account by these circles respectively	5,642
Net ..	9,02,149
Total charges	5,49,948
Deduct	19,659
Net ..	5,30,289
Deduct to tally with the Accountant-General's figures	30
	5,30,259

(*d*) Added with reference to the Conservator's revised figures.

Notes for Coimbatore Circle—

(*a*) Added with reference to March final adjustments.

	Rs.
(*b*) Total receipts (includes Rs. 5,405 realised in Salem Circle)	9,87,382
Deducted as relating to collections by other circles	4,805
Net amount as per F. 39 ..	9,82,577

(*c*) Added being the double adjustment made in Kollegal under voted travelling allowance.
(*d*) Deduct the sum relating to Ootacamund Circle as it has been taken into account by the latter circle.

Financial Results for the year 1932–33—*cont.*

District.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection and improvements of forest.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges	Receipts.	Charges.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Ootacamund Circle.							
Mangalore, North.	68,829	81,717	42,686	5,851	8,924	1,11,515	96,492
Mangalore, South.	2,31,305	1,33,117	32,861	2,706	6,531	2,64,166	1,42,554
Wynaad ..	2,25,188	1,89,544	18,459	7,340	32,466	2,43,647	2,29,350
Nilambur ..	3,50,494	1,08,556	17,209	4,451	35,465	3,67,703	1,48,472
The Nilgiris ..	57,874	79,499	28,708	3,715	22,416	86,582	1,05,630
Palghat	2,08,090	1,52,626	88,912	11,184	9,709	2,97,002	1,73,519
Total ..	11,41,780	7,45,059	2,28,835	35,447	1,15,511	(*a*) 13,70,615	(*b*) 8,96,017
ABSTRACT.							
Total of the above excluding Parlakimedi Maliahs and Golgonda Agency.	..	..	..	..	..	46,12,707	30,70,382
Parlakimedi Maliahs	..	..	..	..	..	36,099	34,927
Golgonda Agency.	..	..	..	..	..	4,557	7,908
Forest Utilization Officer.	..	..	..	..	..	353	44,822
Forest Engineer.	..	..	..	..	..	33,496	24,581
							352
Forest College ..	..	..	..	..	..	40,458	80,675
Working Plans Circle Establishment.	..	..	..	..	..	1,247	1,87,780
Provincial Sylviculturist.	..	..	..	..	..	..	57,555
Chief Conservator	..	..	..	..	..	9,212	98,227
Chenchu Officer.	..	..	..	..	..	..	22,088
Receipts and charges in England.	..	..	..	..	..	40	1,59,853
Grand total, Presidency.	..	..	..	..	..	47,38,169	37,89,150

Note for Ootacamund Circle—

	RS.
(*a*) Total receipts	13,70,615
Deduct revenue included in the Coimbatore Circle inclusive of Rs. 181 referred to in item (*d*) in the Coimbatore circle	782
Net ..	13,69,833

(*b*) Includes Rs. 379 pertaining to the Forest Utilization Officer's division and Rs 8,834 and Rs. — 3,594 pertaining to Forest Engineering division.

ANNUAL FORM No. 43.

Forest Department, Madras Presidency.

PART I.

Statement of Livestock (1) elephants and (2) other livestock during 1932–33.

District.	On hand at the commencement of the year.		Number received during the year.	Number disposed of during the year.	On hand at the end of the year.		Total expenditure on maintenance during the year.
	Number.	Value.			Number.	Value.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) ELEPHANTS.							
Waltair Circle.		RS.				RS.	RS. A. P.
Godavari, Upper..	2	7,329	..	..	2	7,329	754 0 0
Do. Lower..	1	2,500	..	..	1	2,500	204 0 0
Total ..	3	9,829	..	..	3	9,829	958 0 0
Bellary Circle.							
Kurnool, West ..	2	4,000	..	..	2	4,000	799 10 0
		..	..	..	..	..	* 946 5 0
Total ..	..	..	..	..	..	..	1,745 15 0
Salem Circle—Nil.							.. ..
Coimbatore Circle.							
Coimbatore, South.	19	59,600	..	1	18	† 50,800	‡ 14,571 0 0
Total ..	..	..	..	..	..	..	14,571 0 0
Ootacamund Circle.							
Mangalore, North.	4	5,200	1	5	..	..	1,368 4 0
Do. South.	14	31,000	3	4	13	32,700	10,181 10 0
Wynaad	41	79,150	3	10	34	74,675	25,526 0 0
Nilambur	21	63,600	..	2	19	61,500	15,631 0 0
Nilgiris	7	22,600	..	2	5	12,000	3,774 4 9
Total ..	87	2,01,550	7	23	71	1,80,875	56,481 2 9 A
Grand Total, Presidency.	111	2,74,979	7	24	94	2,45,504	73,756 1 9
(2) OTHER LIVESTOCK.							
Waltair Circle.							
Nellore	§ 1	45	..	..	1	45	47 0 0
Total ..	1	45	..	..	1	45	47 0 0
Bellary Circle.							
Buffaloes.							
Anantapur ..	2	75	..	..	2	‖ 81	20 0 0
Total ..	..	..	..	..	..	..	20 0 0
Grand total ..	..	..	..	..	..	..	1,765 15 0

N.B.—The charges of maintenance of all three elephants are shared by Revenue and Forest Department in ratio of 2 : 3. So the amount shown in column 8 is net charge incurred by the Forest Department.

* Pay of establishments.

† Represents revaluation made by the Inspector of livestock in January 1933.

‡ Excludes a sum of Rs. 2,096-8-0 relating to 1931–32 accounts adjusted by the Accountant-General in his summary for February 1933.

§ Buffalo.

‖ This is the correct value as per stock return and store register.

ANNUAL FORM No. 43—*cont.*

Statement of Livestock (1) elephants and (2) other livestock during 1932–33—*cont.*

District.	On hand at the commencement of the year.		Number received during the year.	Number disposed of during the year.	On hand at the end of the year.		Total expenditure on maintenance during the year.
	Number.	Value.			Number.	Value.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Rs.				Rs.	Rs. A. P.
(2) OTHER LIVESTOCK—*cont.*							
Salem Circle.							
Chittoor	1	15	..	..	1	15	50 10 0
Total ..	1	15	..	..	1	15	50 10 0
Coimbatore Circle—Nil.							
Ootacamund Circle.							
Wynaad	2	378	..	1	1	172	446 0 0
Nilambur	20	1,450	..	2	18	1,245	3,516 0 0
Nilgiris	4	305	2	2	4	350	964 1 0
Total ..	(*a*) 26	2,133	(*b*) 2	(*c*) 5	(*d*) 23	1,767	4,886 1 0
Grand Total, Presidency.	30	2,268	2	5	27	1,908	5,003 11 0

(*a*) 22 buffaloes and 4 bulls.
(*b*) Buffaloes.
(*c*) 3 buffaloes and 2 bulls.
(*d*) 21 buffaloes and 2 bulls.

A. Exclusive of Rs. 1,215 being the value of the unspent stock of medicines and provisions of livestock at the close of 1932–33.

Annual Form No. 43—*cont.*

Part II.

Statement of Elephants gone off the list during the year 1932-33

District.	Names.	When purchased or otherwise obtained by Government.	Age. Y.	Age. M.	How disposed of.
		Waltair Circle—Nil.			
		Bellary Circle—Nil.			
		Salem Circle—Nil			
		Coimbatore Circle.			
	Zara	25th September 1897	47		Died on 8th December 1932.
		Ootacamund Circle.			
North Mangalore.	Countess ..	Captured on 6th June 1910 ..	45		Transferred to South Mangalore division.
	Peri	Do. 11th April 1889 ..	67		
	Chamundi ..	Do. 4th February 1900.	39		
	Devamaji ..	Purchased on 3rd February 1926.	31		
	Gajaraj	Born to elephant Chamundi on 25th February 1931.	2		Sold.
South Mangalore.	Roshan	Born to elephant Chambagam on 31st January 1930.	2½		Do.
	Balakrishna ..	Born to elephant Countess on 18th November 1930.	1½		Do.
	Girija	Captured on 5th May 1928 ..	49		Died.
	Sutlej	Do. 27th February 1902.	41	10	Do.
Wynaad.	Emily	Do. 22nd June 1899 ..	53½		Destroyed.
	Libera	Do. 7th March 1909 ..	39		Died.
	Narasimhan ..	Do. 11th January 1927..	35		Do.
	Chiokalaxmy ..	Do. 27th May 1927 ..	45		Do.
	Leela	Born to elephant Mehra on 11th October 1930.	2		Sold.
	Aga Khan ..	Captured on 4th December 1930.	14		Do.
	Gowri	Born to elephant Emily on 31st December 1930.	1	10	Do.
	Damodaran ..	Born to elephant Lalitha on 25th May 1931.	2	1	Do.
	Indrani	Born to elephant Ganga on 21st January 1930.	2	6	Do.
	Hilla	Born to elephant Meenakshi on 30th November 1931.	1	6	Died.
Nilambur.	Theebaw ..	Captured in January 1886 ..	54		Died.
	Ansari	Born to 'Kitty' on 15th May 1931.	1	7	Sold.
Nilgiris ..	Forester	Captured on 1st May 1908.	32		Transferred to Wynaad division.
	Horatius	Do. 16th March 1906 ..	28		

ANNUAL FORM No. 44.

Forest Department, Madras Presidency.

Abstract showing the Value of Stores, Tools and Plant for 1932–33.

District.	Stores.						Difference.	
	On hand at the commencement of the year.		Additions or exclusions during the year.		On hand at the end of the year.		In favour of the year.	Against the year.
	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Value.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Waltair Circle.		Rs.		Rs.		Rs.	Rs.	Rs.
Direction	(b) 318	(c) 5,131	9 (a) 18	114 133	309	5,112	..	19
Ganjam	4,765	17,359	36 (a) 280	1,144 835	4,521	17,668	309	..
Parlakimedi	(c) 894	5,870	6 (a) 11	2 67	889	5,805	..	65
Vizagapatam	1,578	9,187	..	..				
Golgonda Agency	+ 219	1,907	(a) 1	5	1,796	11,089	..	5
Godavari, Upper	4,214	19,278	160 (a) 460	1,073 630	3,914	19,721	443	..
Do. Lower	3,081	37,971	73 (a) 43	536 296	3,111	38,211	240	..
Guntur	3,715	15,419	375 (a) 196	635 159	3,894	15,895	476	..
Nellore	38,226 + 9 miles of tram.	63,465	365 + 2 miles of new tram. (a) 1,563	2,670 + 6,000 2,510	37,028 or 8,798 (d) + 18 miles 3 furlongs and 252 ft.	69,625	6,160	..
Total ..	57,010 + 9 miles of tram.	1,75,587	1,024 + 2 miles of tram (a) 2,572	12,174 4,635	55,462 + 18 miles 3 fur. and 252 ft. of tram track.	1,83,126	7,539	..

Bellary Circle.										
Direction	392	6,464	+ 1 − 3	+ 1 − 13	390	6,422	..	12
Anantapur	3,541	11,105	− 487	− 520	3,054	10,585	..	520
Kurnool, East	3,601	16,891	+ 82 − 152	+ 243 − 292	3,531	16,842	..	49
Do. South	3,581	15,666	− 91	− 118	3,490	15,548	..	118
Do. West	5,345	24,975	+ 14 − 10	+ 634 − 974	5,349	24,635	..	340
Cuddapah, North	3,901	14,285	+ 491 − 36	+ 1,611 − 263	4,356	15,633	1,348	..
Do. * South	3,403	16,839	+ 7 − 90	+ 139 − 633	3,320	16,345	..	494
Total ..	23,764	1,06,195	+ 595 − 869	+ 2,628 − 2,813	23,490	1,06,010	..	185
Salem Circle.								
Direction	232½	7,122	(a) 2 (b) 1	207 4	233½	7,325	203	..
Chittoor	4,029	14,003	(a) 370 (b) 373	551 672	4,026	13,882	..	121
Vellore, East	9,334	29,498	(a) 262 (b) 4,411	120 14,395	5,185	15,223	..	14,275
Do. West	Nil. †		(a) 5,195 (b) 488	14,268 + 1,646 *	4,707	15,383	15,383	..
Salem, North	3,816	21,753	(a) 62 (b) 82	631 601 329	3,796	22,025	272	..
Do. Central	3,442	13,988	(a) 84 (b) 45	705 652	3,481	14,041	53	..
Do. South	3,887	15,233	(a) 95 (b) 844½	141 496	3,137½	14,878	..	355
Total ..	24,740½	1,01,597	(a) 6,070 (b) 6,244½	18,239 17,079	24,566	1,02,757	1,160	..

Note for the Waltair Circle—

(a) Represents exclusions.

(b) Correct figure.

(c) Difference is due to revaluation of certain articles of furniture which are not valued before.

(d) District Forest Officer, Nellore, reports that the difference between the opening balance and the articles on hand at the end of the year is due to conversion of tram articles included in column (2) into miles and furlongs.

(e) Value of stock in the Agency tracts brought under the control of the Forest Department

Note for the Salem Circle—

(a) Additions.

(b) Exclusions.

* Due to revaluation.

† The Division was formed only with effect from 1st December 1932.

Abstract showing the Value of Stores, Tools and Plant for 1932-33—*cont.*

District.	Stores.						Difference.	
	On hand at the commencement of the year.		Additions or exclusions during the year.		On hand at the end of the year.		In favour of the year.	Against the year.
	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Value.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Rs.		Rs.		Rs.	Rs.	Rs.
Coimbatore Circle.								
Direction	221	2,898	3	(a) 628	220	3,502	604	..
			4	(b) 24				
Kollegal	2,741	10,747	83	(a) 594	2,757	10,926	179	..
			67	(b) 415				
North Coimbatore	3,573	15,108	19	(a) 64	3,570	15,047	..	61
			22	(b) 125				
South Coimbatore	3,193	54,617	1,142	(a) 1,107	4,128	54,708	91	..
			207	(b) 1,016				
Madura	3,852	10,770	39	(a) 59	3,356	10,776	6	..
			35	(b) 53				
Tinnevelly	4,088	14,412	83	(a) 954	4,118	15,260	848	..
			53	(b) 106				
Vernacular Training School ..	390	310	..	..	..	..	..	310
			390	(b) 310				
Total ..	17,558	1,08,862	1,369	(a) 3,406	18,149	1,10,219	1,357	..
			— 778	(b) 2,049				
Ootacamund Circle.								
Direction	397	6,813	28	450	420	7,246	433	..
			— 5	17				
Mangalore, North	1,723	13,385	108	683	1,699	12,672	..	713
			— 132	1,396				
Do. South	3,829	44,170	433	2,258	2,979	18,006	..	26,164
			— 1,283	28,422				
Wynaad	5,732	47,017	1,340	1,336	6,364	29,535	..	17,482
			— 708	18,818				
Nilambur	2,462	20,550	139	285	2,551	30,608		
			— 50	227				
The Nilgiris	1,568	13,711	629	168	2,141	13,313		
			— 56	71				

Palghat	2,020	12,361	186	62				
Forest Engineer, Coimbatore.	9,227	1,99,693	— 124	206	2,082	12,783	422	..
			— 1,989	1,40,159	7,238	59,534	..	1,40,159
Total ..	26,968	3,57,700	2,863	5,808				
			— 4,347	1,89,316	25,474	1,74,192	..	1,83,508
Forest Utilization Officer ..	153	2,872	167	763				
Principal, Forest College ..	7,685	53,602	— 279	..	320	3,635	763	..
					7,406	52,347	..	1,255
Grand Total—Presidency ..	A 167,868	A 9,06,415	— 3,001	— 1,74,129	154,867	7,32,286	..	1,74,129

Note for the Coimbatore Circle.—
(*a*) Additions.
(*b*) Exclusions.
* Transferred and included in South Coimbatore stock.
A Revised figures adopted.

Government of Madras

DEVELOPMENT DEPARTMENT

G.O. No. 1429, 24th November 1933

Forests—Administration report—1932-33—Recorded.

Order—No. 1429, Development, dated 24th November 1933.

Recorded.

2. Mr. R. D. Richmond, C.I.E., handed over charge of the office of Chief Conservator of Forests during the year under review and was succeeded by Mr. A. Wimbush. During the year orders were passed sanctioning the reorganization of the controlling staff of the Forest Department and fixing the future strength of the cadre of the superior staff. The transfer of the control of the clerical staff in District Forest offices from Collectors to District Forest Officers and the bifurcation of the Vellore division are other important administrative features of the year.

3. The area of reserved forests was increased during the year under review by 38 square miles, while that of reserved land was increased by 112 square miles. There was an increase in the quantity of fuel extracted from reserved and leased forests, and in the value of bamboos removed. The quantity of sandalwood sold during the year fell from 672 tons to 648 tons but there was an improvement in the price realized for the product. There was a reduction in the quantity of timber felled during the year, while the quantity departmentally collected but undisposed of increased by about 100 per cent, as a result of the slump in the market. The revenue from minor forest produce has been on the decline during the last three years mainly, it is stated, on account of the low rates realized for tangedu bark during the general depression and the increasing imports of wattle bark.

4. The number of cattle allowed to graze in forests under departmental management rose from 1,409,175 to 1,452,292, while the number grazed in panchayat forests showed a decrease of 12½ per cent as compared with the previous year. The increase in the former is attributed to greater efforts made by District Forest Officers to prevent illicit grazing. The average incidence of grazing in the forests controlled by the department was 5·7 acres a head against 5·9 in 1931–32. Grazing revenue increased from Rs. 5,58,800 to Rs. 5,86,179. These figures exclude the revenue foregone in the case of animals allowed to graze free, which amounted to Rs. 46,014 and Rs. 54,776 respectively. Grazing permits are now available for a whole division, instead of only for a range.

5. Owing to financial stringency the expenditure on roads and communications and on construction and repair of buildings was limited to cases of absolute necessity. A sum of Rs. 6,738 was spent on the construction and repair of wells and on the improvement of water-supply in grazing grounds.

6. There was generally an increase in the number of offences under the Forest Act and consequently in the amount of compounding fees realized from the offenders. The percentage of cases which ended in conviction also showed an increase.

7. Section III of the Chief Conservator's report records the activities of the department under the head of "Sylviculture" and records the results of very interesting work done; in particular, the recent developments in the artificial regeneration of dry fuel forests are of great promise. Progress continued in the preparation of working plans and more than two-thirds of the total area of reserved forests will very shortly be covered by sanctioned working plans.

8. The forest village system was in operation during the year in the North Mangalore division where there were three panchayats. The Government understand that only one of them has since renewed its agreement with the department and that the others are not functioning.

9. In a year of continued trade depression it was hardly to be expected that the operations of the department could be extensive or profitable. It is the more gratifying to observe that the working of the department for the year resulted in a surplus of 9·49 lakhs against 0·08 lakhs in the previous year.

(By order of the Governor in Council)

C. A. HENDERSON,
Secretary to Government.

To the Chief Conservator of Forests.
" Accountant-General.
" Board of Revenue (Land Revenue and Settlement).
" Secretary to the Government of India, Department of Education, Health and Lands (with C.L.).
" Inspector-General of Forests (with C.L.).

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